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ABSTRACT

The curriculum guide was developed to serve hearing impaired children at the Kendall Demonstration School elementary/middle school in Washington, D.C. An introductory section explains the purposes of the curriculum which provides a comprehensive format for the development of all areas of auditory and speech skills, i.e., audition, speechreading, speech (phonetic and phonologic), and functional communication. The next section provides guidelines for developing the communication portion of the Individualized Education Program by detailing child development in nine areas: degree of hearing loss, hearing aid use, auditory development, speechreading development, intelligibility rating, phonetic speech development, phonologic speech development, functional communication development, and language development. The next section explains teaching strategies organized by either environment-related or message-related variables. The major portion of the guide consists of teaching activities and materials for auditory and speech training. For each instructional goal suggested strategies and materials are offered. Appendixes include a description of auditory and speech services at the Kendall school, directions for checking the hearing aid, the Kendall Communicative Proficiency Scale, and copies of record-keeping forms. (DB)

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KDES CURRICULUM GUIDE FOR

AUDITORY AND SPEECH TRAINING

KENDALL DEMONSTRATION ELEMENTARY SCHOOL
GALLAUDET UNIVERSITY
WASHINGTON, DC

Developed by:
Debra Berlin Nussbaum, Audiologist
Bettie Waddy-Smith, Speech and Language Pathologist
Vanessa Wilson-Favors, Speech and Language Pathologist

"to give our children roots and wings"

Second Edition

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KENDALL DEMONSTRATION ELEMENTARY SCHOOL
CURRICULUM GUIDE FOR AUDITORY AND SPEECH TRAINING

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KDES CURRICULUM GUIDE FOR AUDITORY AND SPEECH TRAINING

PREFACE

During the 1980-81 school year, the Kendall Demonstration Elementary School (KDES) undertook the development of a curriculum guide series, a clear and accurate representation of the school's programs in Auditory Skills, Science, Language Arts, Mathematics, and Social Studies. Curriculum objectives, which had been several years in development, were arranged in a scope and sequence format. Each objective was supported by student activities, instructions for teachers, recommended resources, and in some cases, evaluation strategies.

As part of the initial development process, early drafts of the guides were used in KDES classrooms and evaluated by teachers. That evaluation provided data for revisions, and first editions of the guides were published and offered to other programs in 1982. Since that time, additional evaluation data have been collected from KDES teachers and students.

This new KDES Curriculum Guide for Auditory and Speech Training incorporates many recommendations based on the evaluation of the earlier Auditory Skills Guide. As well as incorporating training in both receptive and expressive skills, the guide now includes a detailed teaching philosophy. The objectives are organized by levels as well as content areas, and the guide recommends a series of teaching and learning activities for each objective.

Looking to the Future

In addition to the curriculum guides, KDES is currently involved in a major effort to design criterion-referenced tests that will accurately evaluate student achievement of curriculum objectives in each of the four core areas. Those items are being pilot tested in KDES classrooms, and will be field tested in other programs serving deaf students. In the near future, the criterion-referenced test items will be available from Outreach as a supplement to the curriculum guide series.

During the course of this development effort, KDES has also been implementing a computer-managed education system (CMES), designed to deliver low-cost computer technology to schools and programs serving hearing impaired students. Both CMES

hardware and software systems are available from KDES at reasonable cost, and can be adapted for any educational environment. For further information about computer-aided instruction, additional Pre-College curriculum materials, or opportunities for in-service training, please contact:

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Gallaudet Pre-College Programs
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KDES CURRICULUM GUIDE FOR AUDITORY AND SPEECH TRAINING

FOREWORD

Total communication may be defined as "a philosophy that encourages the use of all available oral, manual, and speech modes, to ensure effective communication with and among hearing impaired people." The experience of educators at Gallaudet University, and in the university's Pre-College Programs, suggests strongly that deaf students learn more easily and effectively when they have free access to a flexible range of communication modes for both expression and reception.

The total communication requirements of elementary school programs, whether mainstream or dedicated, include the use of a wide range of communication strategies in a variety of situations. In a total communication classroom, teachers often find themselves selecting different combinations of communication strategies for each individual child.

At the Kendall Demonstration Elementary School (KDES), communication training is seen as "everyone's job." School professionals take a thoroughly integrated approach to building communication skills among students. Training for speech, audition, and speechreading, are not limited to specialized "speech" classes. On the contrary, practice in these essential skills is part of the daily routine in every curriculum area. In turn, communication training sessions for individuals and small groups incorporate concepts, language, and instructional materials from the whole curriculum.

This edition of the KDES Curriculum Guide for Auditory and Speech Training goes far beyond the 1982 Auditory Skills Curriculum Guide. Its broader scope encompasses training in speechreading and spoken language, as well as audiology. Like the new editions of the guides for Language Arts, Mathematics, Science, and Social Studies, it is designed to support instruction for students at all elementary levels, grades one through nine.

- The learning objectives on which the guide is based are arranged in sequence of development or difficulty, helping teachers plan for students of all ages and skill levels.

- Each objective is supported by an interesting variety of introductory and practice activities, as well as recommended resources, offering valuable assistance with daily lesson planning.

This book was developed through the cooperation of an experienced team of professionals at the Kendall School: Debra Berlin Nussbaum, Audiologist; and Bettie Waddy-Smith and Vanessa Wilson-Favors, Speech and Language Pathologists. The developers of the guide represent a total of more than 40 years of work with hearing impaired students, both in the classroom and the communications laboratory.

Other members of the KDES faculty and administration have contributed to the development of this guide by reviewing the work in progress and providing suggestions, insights, and specific activity plans. Mary Abrams, managing editor of Outreach Products, part of the Pre-College Center for Curriculum Development, Training, and Outreach, assisted with final editing, formatting, and production of the book.

Margaret Hallau, Ph.D., Director
Center for Curriculum Development, Training, and Outreach
Gallaudet Pre-College Programs

KDES CURRCIULUM GUIDE
FOR AUDITORY AND SPEECH TRAINING

UNIT I. INTRODUCTION AND PURPOSE

UNIT I

INTRODUCTION AND PURPOSE

The KDES Auditory Skills Curriculum Guide was originally published in 1982. Since that time it has been used at the Kendall Demonstration Elementary School, and in many other programs, to develop individualized educational plans (IEPs) for hearing impaired students in the areas of audition and speechreading. In use, it became apparent that the format of the guide was sometimes cumbersome and confusing. There also appeared to be gaps in the information provided.

As in any program, changes occurred to streamline the goal setting process. A new, more functional system has been used successfully for three years at KDES to develop IEPs for auditory and speechreading development and hearing aid use. The format became so successful and easy to use that the speech therapists at KDES adopted similar formats for charting student progress in the development of speech (phonetic and phonologic) and functional communication. They also began development of a new speech guide to incorporate the format.

As the work proceeded, it became clear that the speech guide should be merged with the guide for audition and speechreading, thus covering the overall scope and sequence of oral and aural development in one curriculum. The integration of oral and aural skills development was already clearly reflected in the organization of the KDES communication program. It made sense, therefore, for the new curriculum guide to reflect that integration.

Purposes of the Auditory and Speech Training Curriculum

In its current form, this guide is designed to provide:

- A comprehensive format for the evaluation and development of all areas of auditory and speech skills, i.e., audition, speechreading, speech (phonetic and phonologic), and functional communication.
- A structured, easy-to-use format for developing student IEPs in the areas of audition, speechreading, and speech communication.
- A foundation for understanding the integration of oral and aural communication as part of total communication.

OVERVIEW AND COMPONENTS OF THE GUIDE

The KDES Curriculum Guide for Auditory and Speech Training provides a comprehensive program for describing students' communication skills; setting appropriate communication goals; and choosing activities, materials and strategies to meet those goals. The guide was developed for use with hearing impaired children from birth through junior high school, in a total communication setting; but the KDES approach is also useful for programs using other communication methods. This guide is intended for use by speech and language pathologists, audiologists, and teachers of the hearing impaired. It is assumed that users of the guide will have had at least basic training in working with hearing impaired students.

The guide is divided into three major areas, as follows:

A. Developing a Communication IEP.
B. Strategies for Auditory and Speech Communication.
C. Materials and Activities.

A. Developing a Communications IEP

This section details a comprehensive system for describing students' current abilities and goals in nine areas of communication development:

- o Degree of Hearing Loss
- o Hearing Aid Use
- o Auditory Development
- o Speechreading Development
- o Intelligibility Rating
- o Speech Development—Phonetic
- o Speech Development—Phonologic
- o Functional Communication Development
- o Language Development

It should be noted that while language development is one of the areas included in this guide, the KDES philosophy of language development is not comprehensively covered here. This guide was designed for use in conjunction with the KDES Language Arts Curriculum Guide, which details the complete language development approach supported at KDES.

B. Strategies for Auditory and Speech Communication

This section describes the many variables to be considered in designing auditory and speech communication training for hearing impaired students. These strategies are based on awareness and manipulation of variables related to the student's communication environment and to the message being communicated. Understanding and utilizing the strategies detailed in this section is central to the success of the approach detailed in this guide.

C. Materials and Activities

This section recommends tested ways of helping students develop auditory and speech skills. Activities are provided in six of the nine goal setting categories covered by the student's communication IEP: Hearing Aid Use, Audition, Speechreading, Functional Communication, and Speech, both Phonetic and Phonologic. Obviously, no activities are needed for Degree of Hearing Loss or for Intelligibility Rating; and Language Development activities, as noted earlier, are detailed in the KDES Language Arts Curriculum Guide.

The arrangment of activities in separate categories is not meant to imply that training in each area occurs in isolation. It is important to remember that a primary goal for communication training is integration of skills. Thus, when students work on speech reception in a specific area, such as familiar phrases, it may also be appropriate to incorporate their phonetic and phonologic speech goals into the same activitity. For example, students who are working to identify the familiar phrases "sit down," "go to the bathroom," and "line up," might also appropriately practice the goal of vocalizing the phrases, focusing on production of their individually targeted sounds.

PHILOSOPHY OF THE PROGRAM

Auditory and Speech Development in Total Communication

As defined by the Conference of Executives of American Schools for the Deaf, Total Communication is "a philosophy incorporating the appropriate oral, manual, and speech modes of communication, in order to ensure effective communication with and among hearing impaired persons" (Pahz & Pahz, 1978, page 10). This philosophy guides the education of hearing impaired children nationwide.

This definition of total communication, while outlining the channels that can be used to communicate with hearing impaired children, does not describe to what degree each of these techniques should be used with each child. The definition leaves a great deal of room for interpretation. Implementation of a total communication environment tends to vary greatly from school to school, and even from teacher to teacher.

The philosophy of total communication is flexible enough to be interpreted differently in each situation, depending on the specific communication needs of individual students. One prevailing misinterpretation is that all communication modalities--oral, manual, and speech--must be used simultaneously at all times. Rigid application of this idea could deny some students the opportunity to develop their own most effective communication modalities. For instance, while one child may benefit from the use of manual communication all or most of the time, another may seek manual cues only for reinforcement and clarification.

Total communication has significant implications for training in audition, speechreading, and speech. Depending on its implementation, it has the potential either to enhance or inhibit the development of practical communication skills among hearing impaired children. Audition, speechreading, and speech development may be inhibited when manual cues are available all of the time; children who never need to talk or listen are unlikely to develop those skills to their fullest potential.

But total communication has even greater potential to enhance rather than suppress the development of a wide variety of communication skills. Properly designed, a total communication environment helps most hearing impaired children develop the ability to obtain information through audition and speechreading, and to express themselves through speech when appropriate.

The KDES Approach to Auditory and Speech Training

KDES professionals take a thoroughly integrated approach to enhancing the development of communication skills. Auditory, speechreading, and speech training are infused throughout the daily routine and in all curriculum areas,

helping students experience communication as a functional, holistic process. KDES takes an essentially natural-language approach to training, using every opportunity to develop skills in the context of the school environment.

The integrated approach at KDES means that within the broad context of total communication, students are encouraged to use the full range of oral and aural communication modes in all curriculum areas and throughout the daily routine, not just during specified training sessions. Conversely language, concepts, and instructional materials drawn from the the entire curriculum form the basis for individual and small group communication training sessions.

The experience at KDES suggests that the integrated approach is most successful when teachers, parents, and other concerned adults, as well as therapists, are actively involved in building student communication skills. The school's team approach helps teachers and parents work on communication training through daily activities. To accomplish this, speech and hearing professionals demonstrate effective ways to engage students in developing usable skills for audition, speech, and speechreading. This approach is further described in the article "Teaming for Speech and Auditory Training" (in Perspectives for Teachers of the Hearing Impaired, Nov/Dec, 1985. See Reference section of this book).

Describing the Program

The speech component of the KDES program is based on Dr. Daniel Ling's approach to developing speech skills in hearing impaired children. This approach is detailed in his book, Speech and the Hearing Impaired Child: Theory and Practice (see Reference section).

The KDES guide organizes Dr. Ling's broad categories of speech development (phonetic and phonologic), and subskills (spontaneous vocalization, supra-segmental feature development, target sound development, etc.) into a format compatible with an integrated philosophy of auditory and speech development. Development of individual speech sounds is one component of the KDES program that is not detailed in this guide. A procedure for developing individual speech sounds is detailed in Dr. Ling's book and in the Speech Curriculum Guide of the Arizona School for the Deaf and the Blind (available through the Gallaudet Pre-College Curriculum Guide Bank. See Reference section).

The auditory and speechreading components of this guide are based on Dr. Norman Erber's hierarchy of auditory development. The sequential auditory levels: Awareness, Discrimination, Identification, and Comprehension are described by Erber in the chapter "Auditory Training" of Hearing and Deafness. Those levels are also defined in the Glossary, Unit II of this guide.

KDES CURRICULUM GUIDE

FOR AUDITORY AND SPEECH TRAINING

UNIT II. GLOSSARY OF TERMINOLOGY

UNIT II
GLOSSARY OF TERMINOLOGY

Audition: Reception of information by listening alone.

Auditory Functioning Level: A hierarchy of listening abilities. The levels used throughout the Guide and outlined below are based on terminology described by Erber, 1982.

Awareness: The ability to detect the presence or absence of sound. At this level the student knows a sound is there, yet does not know what the sound is or if it differs from any other sound.

Discrimination: The ability to perceive similarities and differences among sounds. At this level a student can indicate whether two or more sounds are the same or different yet cannot tell what the sounds are.

Identification: The ability to recognize a direct representation of a stimulus. At this level a student can label an exact representation of a sound by pointing, repeating, signing, drawing, etc., yet cannot respond appropriately to that sound in the natural environment. For example, the child hears the sentence "What's your name?" and can point to the written sentence "What's your name?"

Comprehension: This is the most complex auditory ability, requiring interpretation of sound. A comprehension response differs from an identification response in that the listener does not simply repeat what was said, but must indicate understanding with a response that differs from the stimulus. For instance, a student who is asked "Where do you live?" and replies "Where do you live?" indicates only identification of the sound. A student who responds to the question "Where do you live?" by saying, "29 Maple Street," is indicating comprehension.

Aural: Reception of information through a combination of audition and speechreading.

Configuration of Hearing Loss: Shape of hearing loss as described by the following terms:

Flat: Hearing loss is about the same at various frequencies.

Sloping: The ability to hear in the lower frequencies is better than in the higher frequencies.

Rising: The ability to hear in the higher frequencies is better better than in the low frequencies.

Degree of Hearing Loss: The extent of hearing loss as described by the following terms:

Mild:	25 to 40 dB loss
Moderate:	41 to 55 dB loss
Moderately Severe:	56 to 70 dB loss
Severe:	71 to 90 dB loss
Profound:	91 or more dB loss

Fading Cues: A technique used in auditory and speechreading training. It involves the gradual elimination of communication cues easily understood by students, such as manual communication, to challenge development of more difficult skills, such as speechreading and audition. This technique requires students to communicate in the mode currently being trained, with more readily perceived cues faded or eliminated as appropriate.

Functional Communication: Supportive skills that contribute to the ability to express and receive messages, including mouth movements, facial expressions, conversational strategies, and telephone skills.

Limiting Options: A technique of structuring a communication situation by indicating a choice of messages to be presented (e.g., saying to a student: "Maybe I will say 'sit down,' maybe I will say 'line up'"). Choices can be structured to change the auditory difficulty of the task.

Non-Linguistic Sounds: Sounds that are not language based, including music, environmental sounds (slamming doors, bells), and human non-speech sounds (humming, coughing, etc.).

Oral: Expression of information via vocalization or lip movement.

Phonetic: Production of and differentation between sounds that are not meaningful.

Phonologic: Meaningful use of speech sounds.

Residual Hearing: The extent of hearing potential available to a hearing impaired person.

Spontaneous Connected Language: Connected speech produced for the primary purpose of interpersonal communication. Such vocalizations should include language phonemes and be clearly articulated.

Spontaneous Vocalizations: This refers to automatic vocalizations produced without specific modeling or request by another person. These vocalizations can consist of single sounds or combinations, and need not be clearly articulated. They are often made for purposes of vocal play.

Suprasegmental Features: Qualities of sound a student may be able to perceive or reproduce that can assist in expression and reception of speech, including pitch, duration, intensity, intonation patterns, etc.

Target: A specific skill being developed. It could be a suprasegmental feature--the correct production of a sustained vocalization or the correct production of a specific vowel, consonant, or vowel/consonant combination, i.e., [th] or [e] or [be].

Total Communication: An approach to communication that employs manually coded English, speech, speechreading, American Sign Language, fingerspelling, mime, gestures, and any other appropriate strategies. These modalities need not be used siumltaneously, but as appropriate for each individual and situation.

Visual Phonics: A system that uses 43 hand cues and 43 corresponding written symbols to help improve speech and reading skills of deaf students. It differs from Cued Speech, which uses hand cues to represent syllables; Visual Phonics uses hand shapes and movements to represent individual sounds.

UNIT III

TRAINING FOR AUDITORY AND SPEECH SKILLS DEVELOPMENT

The integration of speech and auditory training in a total communication environment requires a) understanding of the numerous variables that influence students' reception and expression of speech and auditory information, and b) knowledge of how to control those variables to build speech and auditory skills. Variables that can be manipulated are related either to the student's communication environment or to the message being communicated.

I. Environment-Related Variables

- A. Amplification
- B. Signal-to-noise level
- C. Availability of total communication cues (fading cues)
- D. Situational support

II. Message-Related Variables

- A. Size/content of response choice set
- B. Familiarity of material, grammar, syntax
- C. Rate of presentation

Environment-Related Strategies

A. Amplification

Amplification allows hearing impaired children an opportunity to use hearing for learning. The consistent use of properly functioning amplification, therefore, is the most influential factor in the development of useful auditory skills in children with significant hearing impairment. Decisions about the most appropriate type of amplification for each child (body or earlevel aid, make and model, individual or group) are made by the audiologist. The child's teacher, however, should monitor the hearing aid daily to insure its proper functioning.

The monitoring program should be twofold. First, it should include a physical check of the child's aid (Is the cord frayed? Is the aid working in an intermittent or distorting manner? Is the receiver cracked? Is the battery good?) Second, the teacher should also check briefly on how the child listens with the aid. One efficient listening check uses Daniel Ling's five-sound test. Appendix B of this guide explains in detail how to check the hearing aid.

B. Signal-to-Noise Levels

Receptively, the ability to be aware of and comprehend an auditory stimulus is directly related to the intensity of the message and of any competing background noise. In structuring auditory training for hearing impaired students, an initial effort must be made to provide an optimal signal-to-noise ratio. This gives students a chance to listen to sound and attach meaning to it under ideal conditions.

As students build their listening skills, progressively poorer signal-to-noise conditions may be introduced, so that they can sharpen their skills in more realistic situations. The difficulty of any listening task can be controlled by modifying the distance of the sound source and the loudness and type of background noise.

Expressively, students must learn to control their own intensity levels and to judge how and when to use loud, quiet, or whispered voices. The noise level in the environment will help students determine which intensity pattern is appropriate for any given situation.

C. Total Communication and Fading Cues

Varying and gradually eliminating the communication cues available to hearing impaired students is the basis of the integration philosophy of speech and auditory development. When a wide variety of total communication cues is available at all times (speech and auditory, manual, facial, etc.) children may lose the opportunity to utilize and develop communication skills that require training and use in isolation.

Receptively, the consistent use of manual communication may decrease a child's motivation to develop speechreading and listening skills. The constant

availability of speechreading information can also lessen dependence on the need to use hearing alone to obtain information. Manipulation of these cues in the daily environment, based on students' current functioning and goals, can provide necessary opportunities to use and develop specific skills as necessary.

Depending on the student's potential and goals, it may sometimes be useful to provide a whole range of total communication cues, then fade them away, requiring the student to use auditory or speechreading cues only. Or it may be appropriate first to provide a message via audition and speechreading, then add manual communication cues for reinforcement.

In developing speechreading skills, it may help to fade the use of voice, encouraging the student to attend to the message on the lips only. This technique of fading voice cues is used primarily for students with significant amounts of residual hearing, or with progressive hearing loss, sice auditory cues may not always be available to them.

Expressively, it is also necessary for students to utilize speech skills (including vocalization, mouth movements, and facial expression) independently of manual communication, in order to develop these skills. Students need opportunities to develop and master speech skills, if they are ever to use them comfortably as part of their communication repertoire.

D. Situational Support

In a wide variety of situations, students can learn to predict what is likely to be heard and what is appropriate to say. Receptively, the communication task is easier when messages are related to predictable situations. Expressively, when students verbalize messages directly pertaining to specific situations, it is usually easier for others to comprehend.

The nature of the communication situation must be considered in structuring opportunities for auditory and speech development. Communication tasks are relatively easy when the message is closely related to the situation. To make the task more difficult, have students communicate with messages in situations that offer little contextual support.

Message-Related Variables

A. Size and Content of Response Choice Set

For an integrated approach to training for auditory and speech skills, it is necessary to modify the content and number of options available to students.

Receptively, ease of comprehension is directly influenced by the content and quantity of messages that may be communicated at specific times. A student who has no prior knowledge of what to listen for (an open set task) may find it difficult to comprehend auditory messages. If the student is given a limited number of choices to listen for (a closed set task), comprehension of the same message should be much easier. Simply put, the more choices available, the harder the task will be.

In addition to the size of a message, aural comprehension is also influenced by its acoustic quality. Thus when modifying the difficulty of a listening task, it is important to consider the acoustic similarities of the choices involved. For example, it would be an easy task for most students to distinguish the message "sit down" from a contrasting item that is acoustically different in duration, for instance, "put on your hearing aid". It would be more difficult to identify "sit down" from a set of items of similar duration, such as "get down," "sit up," "get up."

Expressively, the difficulty of speech tasks can be modified by limiting the number and types of variables students must control. For example, when developing suprasegmental skills, it is easier for students to deal with one feature at a time (pitch, duration, intensity, etc.). As they become comfortable with each suprasegmental feature, the number of variables they are expected to control can be increased. The same is true for segmental features (individual sounds). As students master individual sounds at an automatic level, the number of sounds they can be expected to produce correctly can be increased.

B. Familiarity of the Material, Grammar, and Syntax

The nature of the message being communicated also influences the ease of the communication task, and should be considered in choosing materials for training. Students are more likely to be able to comprehend and reproduce familiar messages than new material.

It should also be noted that the ease of aural comprehension also depends, to some extent, on students' knowledge of grammar and syntax. Students familiar with English structure and sequence may find it possible to make predictions about the meaning of a message, even when it is not totally clear.

C. Rate of Presentation

The speed at which messages are presented is also a consideration for auditory and speech training. Messages should be sent at a natural pace, so as not to distort their characteristics. Materials used for training stiumli should be presented as they would appear in the natural environment. Expressively, every effort should be made to train students to speak at natural conversational rates of speed.

KDES CURRICULUM GUIDE

FOR AUDITORY AND SPEECH TRAINING

UNIT IV. DEVELOPING THE COMMUNICATIONS IEP

Planning for the development of auditory and speech skills becomes a manageable process when a meaningful structure and format are used to describe students' abilities and goals, and to chart their progress. This chapter details a system of planning and record-keeping for nine aspects of communication:

- Levels of Hearing Loss
- Hearing Aid Use
- Auditory Development
- Speechreading Development
- Intelligibility Rating
- Phonetic Speech Development
- Phonologic Speech Development
- Functional Communication
- Language Development (P-Levels)

Detailed lists of target behaviors for the first eight of these areas are provided in Unit V. A list of similar goals for Language Development (P-Levels), compiled for the KDES Language Arts Curriculum Guide, are provided in Appendix C of this book.

UNIT IV

DEVELOPING THE COMMUNICATIONS IEP

Major responsibility for the communication IEP is assumed by the student's speech and language specialist, audiologist, or classroom teacher. If any of these individuals is not available for the IEP meeting, the process can be directed by any one of the three, using information from all three areas. One One person should be responsible for organizing the process.

The people involved in the communication IEP process should collect basic information about the student, to include:

- o The student's audiogram.
- o Formal auditory and speechreading evaluations (Appendix D).
- o Formal speech and language evaluations (Appendix D).
- o Information about informal observations of the student.

Use the lists of functioning levels and goals for the nine skill areas (Unit V), to indicate current levels of student achievement, based on the collected information. The people involved in the IEP process (audiologist, teachers, speech/language specialist, etc.) should recommend realistic, attainable goals, based on information about the student:

- o Current functioning in each of the areas.
- o Hearing level and use of amplification.
- o Intellectual functioning.
- o Additional handicapping conditions, if any.
- o Other contributory factors that may apply.
- o Current and future needs.

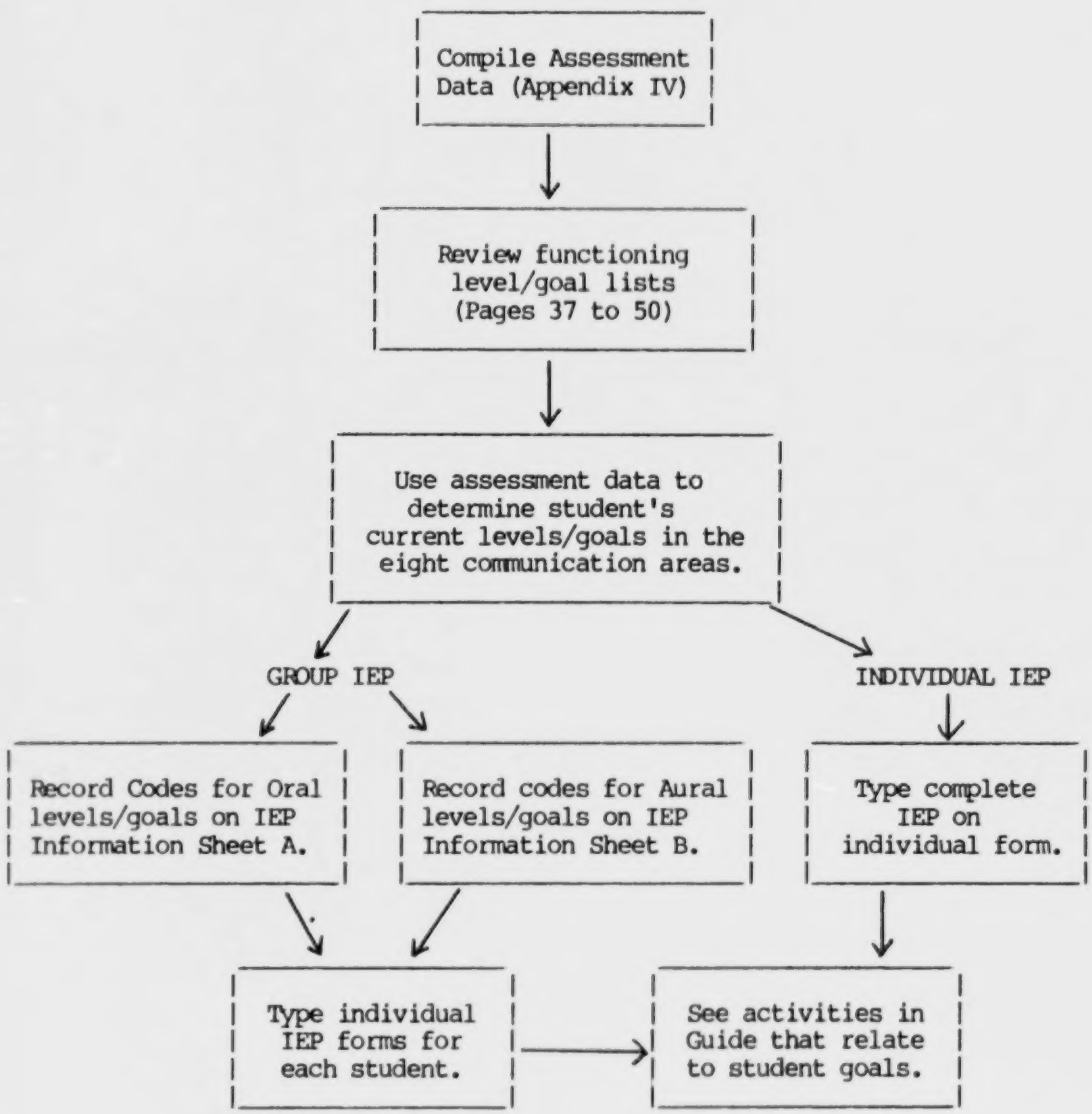
In most school systems, the communication plan is part of each student's overall IEP, and is agreed to during the student's regularly-scheduled IEP meeting. Discussion and approval of communication levels and goals should be handled as are other aspects of the student's educational plan.

Recording Group and Individual IEPs

When an IEP is being developed for a class or group of students, use Form A to record aural function and Form B for oral skills. (Sample forms are provided in Appendix F, and may be copied for school use.)

After group levels and goals have been recorded on Forms A and B, individual IEPs may be typed on Form C or generated by computer. (It is not necessary to start with Forms A and B when developing individual IEPs.) Make sure that final IEP copies have code numbers as well as written goals, so that teachers can find the appropriate activities and strategies listed in Unit VI.

Developing a Communications IEP


Compile Assessment Data (Appendix IV)
Review functioning level/goal lists (Pages 37 to 50)
Use assessment data to determine student's current levels/goals in the eight communication areas.
GROUP IEP
INDIVIDUAL IEP
Record Codes for Oral levels/goals on IEP Information Sheet A.
Record codes for Aural levels/goals on IEP Information Sheet B.
Type complete IEP on individual form.
Type individual IEP forms for each student.
See activities in Guide that relate to student goals.

Form A

IEP INFORMATION SHEET
CLASS AURAL FUNCTIONING LEVELS AND GOALS

Teacher's Name Mrs Franklin Year: 1987-1988

Students' Names	Date of Audiogram	Degree of Loss	Hearing Aid Use		Audition		Speechreading	
			Level	Goals	Level	Goals	Level	Goals
Robert Jones	2/27/87	1c-rt 1b-left	HA 3 HA 4 HA 5	HA 7	A4.2a A5.2a	A3.2a A4.2b A5.2b	SR4.1b	SR4.1c SR5.1c

Form B

IEP INFORMATION SHEET
CLASS ORAL FUNCTIONING LEVELS AND GOALS

Teacher's Name Mrs Franklin Year: 1987-88

Student's Name	Intelligibility Rating	Phonetic Level	Phonetic Goals	Phonetic Targets	Phonologic Level	Phonologic Goals	Phonologic Targets
Robert Jones	IR 1	PT2.1 b PT2.2a	PT 2.2b 2.3b, 3.2a 3.2b, 3.2c 3.3 b	[a], [u], [b], [f], [e]	PL1.2b PL1.3b	PL2.1b, 2.5b, 3.2a 4.2b, 4.2c	[u] [b] [a] [f]

Functional Comm. Level	Functional Comm. Goals	Language Level	Language Goals	Comments
FC1.3b FC2.3a	FC1.4a FC3.5	P4	P5	

Student's Name	Intelligibility Rating	Phonetic Level	Phonetic Goals	Phonetic Targets	Phonologic Level	Phonologic Goals	Phonologic Targets

Functional Comm. Level	Functional Comm. Goals	Language Level	Language Goals	Comments

Student's Name	Intelligibility Rating	Phonetic Level	Phonetic Goals	Phonetic Targets	Phonologic Level	Phonologic Goals	Phonologic Targets

Functional Comm. Level	Functional Comm. Goals	Language Level	Language Goals	Comments

ORAL/AURAL COMMUNICATION IEP

Child's Name: Robert Jones Date: _____

Date of Last Audiogram: 2/27/86

Hearing Levels

Right Ear: (1c) Profound sensorineural hearing loss with residual hearing through 2000 Hz.

Left Ear: (1b) Profound sensorineural hearing loss with residual hearing limited to 1000 Hz and below.

Hearing Aid Use--Current Functioning

HA 3 Puts on ear-level aid.
HA 4 Manages hearing aid and controls.
HA 5 Tests hearing aid battery.

Goal

HA 7 Cleans Earmold.

Audition--Current Functioning

A4.2a Identifies fewer than 10 single words in a structured environment.

A5.2a Identifies fewer than 10 familiar phrases in a structured environment.

Goals

A3.2a Identifies fewer than 10 non-linguistic sounds in a structured environment.

A4.2b Identifies more than 10 single words in a structured environment.

A5.2b Identifies more than 10 familiar phrases in a structured environment.

Speechreading--Current Functioning

SR4.1b Identifies three details in sentences in a structured environment.

Goals: Speechreading

SR4.1c Identifies four details in sentences in a structured environment.

SR5.1a Comprehends specific information in connected passage when given the topic and questions before hearing the passage.

Intelligibility Rating

IR1 Speech is completely unintelligible.

Phonetic Development--Current Functioning

PT2.1b Produces desired duration patterns consistently (sustained, repeated, varied).

PT2.2a Produces desired intensity patterns inconsistently (loud, quiet, whispered).

Goals

PT2.2b Produces desired intensity patterns consistently (loud, quiet, whispered).

PT2.3b Produces desired pitch patterns consistently.

PT3.2a Produces target sounds in single syllables. [a] [u] [b] [f] [e]

PT3.2b Produces target sounds in sustained syllables. [a] [u] [e]

PT3.2c Produces target sounds in repeated syllables. [a] [u] [b] [f] [e]

PT3.3b Produces target sounds using good voice quality consistently [u] [a].

Phonologic Development--Current Functioning

PL1.2b Vocalizes for communication purposes spontaneously (i.e., screams for help, calls for attention, laughs, etc.) and consistently.

PL1.3b Responds to directed vocalization with vocalization consistently.

Goals

PL2.1b Produces appropriate intensity (loud, conversational and whispered volume) in various situations consistently.

PL2.5b Uses overall voice quality that is considered acceptable (i.e., not excessively nasal, breathy, or harsh) consistently.

PL3.2a Produces the correct number of syllables using appropriate duration and rate in words inconsistently.

PL4.2b Produces target sounds in a structured situation with words consistently. [u] [b] [a] [f]

PL4.2c Produces target sounds in a structured situation with phrases inconsistently. [u] [b] [a] [f]

General Communication—Current Functioning

FC1.3b Approximates mouth movements with consonant/vowel combinations in words.

FC2.3a Exhibits appropriate facial expressions for expressing different emotions.

Goals

FC1.4a Approximates mouth movements with familiar phrases.

FC3.5 Selects appropriate conversational strategies (sign, voice, gestures, or a combination of methods), depending on the hearing status of other participants, and the context of the conversation.

Language Proficiency—Current Level

P4 Talks about things in immediate physical environment that he is about to do or intends to do. Talks about things other people are doing, even if they don't have anything to do with him. Uses language to create make-believe conditions. Can talk about several things at once, and manages to say most of what he means, rarely leaving unsaid things that should be expressed. Understands friends and familiar adults easily, and they understand him easily, too.

Goals

P5 Tells complicated stories about things that happened in the past or may happen in the future. Even strangers (at least those accustomed to deaf children) can understand him easily, and he understands them. They understand each other even when one party does not know anything about the place where the story occurs. The child can say a lot about how different things relate to each other; about how one thing makes something else happen; how one thing contradicts another; how one thing changes as a result of another; and how some things have to wait on others. Can talk about what is happening, who is doing what, what state things are in, what people are doing, and why. Can carry on extensive conversations; sticks to the point and has a lot to say from experience that relates to what the other person is saying.

UNIT V

FUNCTIONING LEVELS AND GOALS

In developing the IEP, either for a class or for individual students, target behaviors are used to describe students' abilities and goals, and to chart their progress. This chapter provides lists of target behaviors for eight areas of communication:

- Levels of Hearing Loss
- Hearing Aid Use
- Auditory Development
- Speechreading Development
- Intelligibility Rating
- Phonetic Speech Development
- Phonologic Speech Development
- Functional Communication

Two of the lists--Hearing Levels and Intelligibility Rating--are used only to evaluate student capabilities. Goals are not set in these two areas. The remaining six lists: Hearing Aid Use, Audition, Speechreading, Phonetic and Phonologic Speech, and Functional Communication are each designed to serve two purposes. They describe students' current functioning levels, and they suggest appropriate goals for future development.

A list of similar goals for Language Development (the KDES P-Levels) has been compiled for the KDES Language Arts Curriculum Guide. The P-Levels are reproduced in Appendix C of this book. Their inclusion as an important part of this guide indicates the close interdependence between students' language levels and goals, and appropriate training in communication skills.

FUNCTIONING LEVELS AND GOALS

Explanation of Level and Goal Lists

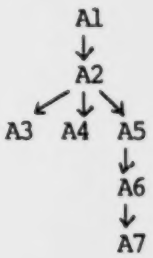
Hearing Loss Levels: This list is used to describe the student's current hearing capability; goals are not set for this area. Six categories shown in the audiogram are detailed, ranging from (1) profound to (6) mild sensorineural loss. Each category is broken down into subcategories (a-e) to further describe hearing loss. For example, a student whose hearing loss is recorded as 1-b would have a profound sensorineural loss with measureable hearing limited to 1,000 Hz or less, bilaterally.

It is often necessary to use two different categories to describe hearing—one for the hearing in each ear. Number 7 is a flexible category, which provides room for comments on the reliability of the audiological evaluation performed, or special qualities related to the hearing loss. For example, a rating of 7-b indicates a hearing loss that appears to be progressive in nature.

Hearing Aid Use: Eight categories (HA1-HA8) are detailed, ranging from the use of amplification (HA1) to consumer information about hearing aid use (HA8). Most categories are independent units, and they are not hierarchical in nature. Any of the categories may be appropriate to describe a student's skills and goals. For example, for a student who has completed HA1 through HA3 (uses amplification, takes off hearing aid, puts on hearing aid), the most appropriate current goal may be HA5 (tests own hearing and battery). It is not necessary for the student to complete HA4 (manages hearing aid controls) first.

Auditory Development: There are seven categories (A1 - A7) related to audition. After determining that a student is consistently aware of sound (A1), the teacher should specify the types of sounds the student comprehends: A2 (suprasegmental features), A3 (non-linguistic sounds), A4 (single words), A5 (familiar phrases), A6 (details in sentences), A7 (connected sentences). The subskills within each category describe the level to which the student can process each category of sound (i.e: A2.2a identifies suprasegmental feature long/short). The functioning levels include Awareness, Discrimination, Identification, and Comprehension (see definitions on page 15).

The seven categories of sound stimuli are essentially hierarchical in nature; however, some skills will emerge simultaneously. The following progression should be considered in setting goals:



Speechreading Development: Five categories (SR1 - SR5) describe the development of speechreading skills. The format is essentially the same as in the section on Audition. Again, after it is determined that a student is aware that speechreading can provide information (SR1), goals SR2 through SR5 specify types of stimuli the student can comprehend from lips and facial expression: SR2 (single words), SR3 (familiar phrases), SR4 (details in sentences), SR5 (connected sentences).

The subskills (i.e., SR2.1 - Discriminates between single words) describe the degree to which students can process speechreading information (Awareness, Discrimination, Identification, Comprehension). As with audition, speechreading categories are essentially hierarchical, with some skills emerging simultaneously. The following progressions should be considered in goal setting.

Intelligibility Rating: Three levels of intelligibility are included among these goals: IR1 (completely unintelligible), IR2 (level of intelligibility when the topic of conversation is known), and IR3 (level of intelligibility when the topic of discussion is not known. The purpose of these ratings is to provide a general, subjective impression of the student's oral communication skills. As with the Hearing Levels, it is not necessary to set goals in this area.

Ideally, intelligibility should be assessed by a panel of five listeners, using a taped recording of the student's speech. For consistency, it may be helpful to use the same list of vocabulary words, familiar phrases, or paragraph for each student. An average of

the five ratings should be taken and entered in the student's chart.

If this method is not practical, intelligibility may be determined by two experienced raters: the student's current speech teacher and one other speech therapist or teacher not directly involved with the student. Raters should listen to a tape of the student's speech made under two conditions (IR2 and IR3), and assign intelligibility ratings for each category.

Phonetic Speech Development: Three categories of phonetic speech development are detailed: PT1 (Use of Spontaneous Vocalizations), PT2 (Development of Suprasegmental Features), and PT3 (Development of Specific Target Sounds). These categories are essentially hierarchical, but progress through the categories will depend on students' individual needs and potential, and on the judgement of the therapist.

Within each category, the order in which subskills are presented should be determined by the student's needs. It is not necessary to complete each category before moving on to the next. For example, within PT1 (Spontaneous Vocalization), some students may work on PT 1.3 (Uses Voice on Demand), even if they have not yet completed PT1.1 (Uses spontaneous vocalization during stimulated activities).

Students may also work on subskills from several different categories simultaneously. For example, it may be practical for students to work on PT2.3 (Pitch Control), while also working on PT3.2a (Development of Specific Target Sounds in Syllables).

with regard to category PT3 (Development of Specific Target Sounds), please note that specific targets for individual students should be identified after formal assessment A suggested order for teaching target sounds can be found in Speech and the Hearing Impaired Child, by Daniel Ling.

Phonologic Speech Development: This section details four categories of phonologic development: PL1 (Spontaneous Vocalization), PL2 (Supra-segmental Features), PL3 (Syllables), and PL4 (Specific Target Sounds). As with phonetic development, phonologic skills are essentially hierarchical. Student progress through the categories will depend on individual needs and potential, and on the judgement of therapists.

Within each broad category it is possible to manipulate the order in which subskills are presented. For example within PL2, a student may work on PL2.5 (Uses overall voice quality that is considered acceptable), before developing PL2.1 (Uses loud, conversational, and whispered volume in appropriate situations).

Nor is it necessary to complete one category before moving on to the next; students can work within several categories at the same time.

For example, a student might work simultaneously on PL3.2 (Produces the correct number of syllables in single words using appropriate duration and rate) and on PL4.2.b (Produces target sounds in words in a structured situation).

With regard to PL4 (Specific Target Sounds in Words) it is important to remember that the subskills (PL4.1 a-f to PL4.3 a-b) must be repeated as each new target sound is addressed.

Functional Communication Development: Three categories of skills are detailed. Although these areas are integral to communication, they are not directly addressed in other sections of the Guide. The categories are FC1 (Mouth Movements), FC2 (Facial Expression), and FC3 (Conversational Strategies). Goals should be based on individual student needs and the judgement of the therapist. It is not necessary for students to complete one category before proceeding to the next.

Language Proficiency Levels: The KDES Communicative Proficiency Scale (KCPS), is also referred to as the P-levels. It is a 15-point descriptive developmental scale for rating through-the-air (signed and spoken) language proficiencies of deaf and hard-of-hearing children. Each rating level is defined by five criteria: reference, content, cohesion, use, and form. The P-levels are listed in Appendix III, and should be used to supplement and support the other areas in planning for appropriate development of auditory and speech skills.

At Kendall School, students' P-levels are usually determined by classroom teachers, who have the opportunity to observe students using language in a variety of settings. The goal is always to have students reach the next level of proficiency on the scale. The P-levels should be used in conjunction with the KDES Language Arts Curriculum Guide (see References).

PRESENT FUNCTIONING LEVELS

HEARING LEVELS

1. Profound sensorineural hearing loss (90dB/HL or lower):

   a. With no measurable hearing at the limits of the audiometer.

   b. With residual hearing limited to 1000 Hz and below.

   c. With residual hearing through 2000 Hz.

   d. With residual hearing through 4000 Hz to 8000 Hz.

2. Severe to Profound sensorineural hearing loss (70dB/HL sloping to 90 dB/HL or lower):

   a. With residual hearing limited to 1000 Hz and below.

   b. With residual hearing through 2000 Hz.

   c. With residual hearing through 4000 Hz to 8000 Hz.

3. Severe sensorineural hearing loss (71 - 90 dB/HL):

   a. With residual hearing levels essentially the same in both high and low frequencies.

   b. With residual hearing better in the high and low frequencies than in the middle frequencies (U-shaped).

   c. With residual hearing levels better in the lower frequencies than the higher frequencies.

   d. With residual hearing better in the higher frequencies than the lower frequencies.

4. Moderately Severe sensorineural loss (55 - 70 dB/HL):

   a. With residual hearing sloping to the profound range in the higher frequencies.

   b. With residual hearing sloping to the severe range in the higher frequencies.

   c. With residual hearing remaining at a moderately severe level throughout the high and low frequencies (flat).

5. Moderate sensorineural hearing loss (41 - 55 dB/HL):

   a. With residual hearing sloping to the profound range in the higher frequencies.

   b. With residual hearing sloping to the severe range in the higher frequencies.

   c. With residual hearing levels remaining at a moderate level throughout the high and low frequencies.

6. Mild sensorineural hearing Loss (26 - 40 dB/HL):

   a. With residual hearing sloping to a moderate level in the higher frequencies.

   b. With residual hearing sloping to a moderately severe level in the higher frequencies.

   c. With residual hearing sloping to a severe level in the higher frequencies.

   d. With residual hearing dipping to a profound level in the higher frequencies.

Note the following information as appropriate for each child:

7. Hearing loss:

   a. Is stable.

   b. Appears to be progressive in nature.

   c. Has an overlapping conductive component.

   d. Is suspected to be as indicated. Test results indicate minimal response levels only, due to the young age of the child.

   e. Is suspected to be as indicated. Test results are believed to be supra-threshold, as this child was difficult to test.

PRESENT FUNCTIONING LEVELS AND GOALS

HEARING AIDS (HA)

HA1 Uses Amplification:

HA1.1 Allows aid to be put on.

HA1.2 Keeps aid on for short time (10 minutes).

HA1.3 Wears aid for a few hours.

HA1.4 Wears aid most of the day.

HA2 Takes off Hearing Aid:

HA2.1 Removes earmold from ear.

HA2.2 Removes aid from harness (body aid users only).

HA2.3 Places aid in designated place

HA3 Puts on Hearing Aid:

HA3.1 Puts on body aid.
- a. Places harness on body.
- b. Places aid in harness.
- c. Places earmold in ear.

HA3.2 Puts on ear-level aid.
- a. Places aid behind ear (no earmold).
- b. Assists with placing earmold in ear.
- c. Places earmold/aid on with no assistance.

HA4 Manages Hearing Aid Controls:

HA4.1 Indicates position of control on hearing aid.
- a. On/Off
- b. Volume

HA4.2 Manipulates on/off and volume controls:
- a. While holding aid.
- b. With aid on ear.

HA4.3 Turns hearing aid on and sets volume independently.

HA5 Tests Hearing Aid Battery:

HA5.1 Places battery on tester in appropriate space.

HA5.2 Turns voltmeter to appropriate place.

HA5.3 Places testing stem on battery.

HA5.4 Indicates understanding of meter reading.

HA6 Changes Hearing Aid Battery:

HA6.1 Locates battery compartment.

HA6.2 Opens battery compartment.

HA6.3 Takes out old battery.

HA6.4 Puts in new battery.

HA7 Cleans Earmold:

HA7.1 Indicates when mold is dirty.

HA7.2 Detaches mold from aid.

HA7.3 Loosens canal debris with pipe cleaners.

HA7.4 Washes mold in warm soapy water.

HA7.5 Dries mold completely.

HA8 Knows Consumer Information:

HA8.1 Indicates hearing aid brand name and model number.

HA8.2 Indicates battery size specific to aid.

HA8.3 Indicates ability to locate serial number on hearing aid.

PRESENT FUNCTIONING LEVELS AND GOALS

AUDITION (A)

A1 Awareness:

A1.1 Demonstrates no awareness of sound.

A1.2 Demonstrates awareness of loud sounds (> 70dB) by blinking or shifting eyes, stopping movement, or turning head:
a. inconsistently.
b. consistently.

A1.3 Demonstrates awareness of quiet sounds (< 70dB) by blinking or shifting eyes, stopping movement, or turning head:
a. inconsistently.
b. consistently.

A1.4 Produces a conditioned response to sound (puts block in box; raises hand, etc.).

A2 Suprasegmental Features:

A2.1 Discriminates between suprasegmental features:
a. long/short.
b. loud/soft.
c. high/low.

A2.2 Identifies suprasegmental features:
a. long/short.
b. loud/soft.
c. high/low.

A2.3 Comprehends information based on suprasegmental features.

A3 Non-Linguistic Sounds:

A3.1 Discriminates between non-linguistic sounds.

A3.2 Identified non-linguistic sounds in a structured environment.
a. few (< 10)
b. many (> 10)

A3.3 Comprehends non-linguistic sounds in the natural environment.

A4 Single Words

A4.1 Discriminates between single words.

A4.2 Identifies single words in a structured environment:
a. few (< 10).
b. many (> 10).

A4.3 Comprehends many single words in the natural environment.

A5 Familiar Phrases

A5.1 Discriminates between familiar phrases.

A5.2 Identifies familiar phrases in a structured environment.
a. few (< 10)
b. many (> 10)

A5.3 Comprehends many familiar phrases in the natural environment.

A6 Details in Sentences

A6.1 Identifies details in sentences in a structured environment:
a. two details.
b. three details.
c. four details.

A6.2 Comprehends details in the natural environment.

A7 Connected Sentences

A7.1 Comprehends specific information about a connected passage, given topic and questions before hearing passage:
a. in quiet.
b. in background noise.

A7.2 Comprehends specific information about a passage, given no prior information about passage:
a. in quiet.
b. in background noise.

PRESENT FUNCTIONING LEVELS AND GOALS

SPEECHREADING (SR)

SR1 Awareness of Speechreading :

SR1.1 No awareness that speechreading provides information.

SR1.2 Aware that speechreading provides information
- a. inconsistently.
- b. consistently.

SR2 Single Words:

SR2.1 Discriminates between single words.

SR2.2 Identifies single words in a structured situation.
- a. few (< 10)
- b. many (> 10)

SR2.3 Comprehends many words in the natural environment.

SR3 Familiar Phrases:

SR3.1 Discriminates between familiar phrases.

SR3.2 Identifies familiar phrases in a structured situation.
- a. few (< 10)
- b. many (> 10)

SR3.3 Comprehends many familiar phrases in the natural environment.

SR4 Details in Sentences:

SR4.1 Identifies details in sentences in a structured situation.
- a. two details
- b. three details
- c four details

SR4.2 Comprehends details in the natural environment.

SR5 Connected Sentences

SR5.1 Comprehends specific information about a connected passage:
- a. Given topic and questions before hearing the passage.
- b. Given no prior cues about the passage.

PRESENT FUNCTIONING LEVELS AND GOALS

INTELLIGIBILITY RATING

IR1. Speech is completely unintelligible.

IR2 Produces spontaneous communication (indicate whether in words, phrases, sentences, or discourse) which is understood by:

a. Experienced listeners inconsistently.

b. Experienced listeners consistently.

c. Inexperienced listeners inconsistently.

d. Inexperienced listeners consistently, when given prior cues.

IR3 Produces spontaneous communication (indicate whether in words, phrases, sentences, or discourse) which is understood by

a. Experienced listeners inconsistently.

b. Experienced listeners consistently.

c. Inexperienced listeners inconsistently.

d. Inexperienced listeners consistently, when given no prior cues.

PRESENT FUNCTIONING LEVELS AND GOALS

PHONETIC (PT)

PT1. Spontaneous Vocalizations

PT1.1 No spontaneous vocalization during stimulated activities (playing, crying).

PT1.2 Vocalizes spontaneously during stimulated activities (playing, crying). No indication of vocalizing for communication purposes.

PT1.3 Produces voice on demand:
a. inconsistently.
b. consistently.

PT2. Suprasegmental Features:

PT2.1 Produces desired duration patterns (sustained, repeated, varied):
a. inconsistently.
b. consistently.

PT2.2 Produces desired intensity patterns (loud, quiet, whispered):
a. inconsistently.
b. consistently.

PT2.3 Produces desired pitch patterns (high, mid, low):
a. inconsistently.
b. consistently.

PT2.4 Produces appropriate stress patterns in nonsense syllables:
a. inconsistently.
b. consistently.

PT2.5 Produces suprasegmental features using appropriate voice quality:
a. inconsistently.
b. consistently.

PT3. Specific Target Sounds:

(Specify Targets after each subskill.)

PT3.1 Discriminates target sounds in syllables:

a. inconsistently. _____

b. consistently. _____

PT3.2 Produces target sounds:

a. in single syllables. _____

b. in sustained syllables. _____

c. in repeated syllables. _____

d. in alternated syllables. _____

e. with varied duration. _____

f. with varied intensity. _____

g. with varied pitch. _____

PT3.3 Practices target sounds using good voice quality:

a. inconsistently. _____

b. consistently. _____

PT3.4 Produces target sounds at the automatic level without consciously planning production. _____

PRESENT FUNCTIONING LEVELS/GOALS

PHONOLOGIC (PL)

PL1 Spontaneous Vocalizations

PL1.1 No spontaneous vocalization for communication purposes.

PL1.2 Vocalizes for communication purposes spontaneously (i.e., screams for help, vocalizes for attention, laughs, etc.):
a. inconsistently.
b. consistently.

PL1.3 Responds to directed vocalization with a vocalization:
a. inconsistently.
b. consistently.

PL2 Suprasegmental Features:

PL2.1 Produces appropriate intensity (loud, conversational, or whispered) in various situations:
a. inconsistently.
b. consistently.

PL2.2 Produces pitch that sounds natural and appropriate:
a. inconsistently.
b. consistently.

PL2.3 Produces appropriate durational patterns in words (without excessive vowel prolongation):
a. inconsistently.
b. consistently.

PL2.4 Produces appropriate patterns of duration, intensity and intonation during meaningful communication, but "words" may not be understood:
a. inconsistently.
b. consistently.

PL2.5 Produces overall voice quality that is considered acceptable (not excessively nasal, breathy, or harsh).
a. inconsistently
b. consistently

PL3 Syllabification

PL3.1 Discriminates the correct number of syllables:
- a. in words.
- b. in short phrases.
- c. in short sentences.

PL3.2 Produces the correct number of syllables using appropriate duration and rate:
- a. in words inconsistently.
- b. in words consistently.
- c. in phrases inconsistently.
- d. in phrases consistently.
- e. in sentences inconsistently.
- f. in sentences consistently.

PL3.3 Produces appropriate syllable stress (i.e., word: CONvict/conVICT; phrase: THAT'S for me/that's for ME).

PL3.4 Produces appropriate rate and phrasing of words:
- a. in phrases inconsistently.
- b. in phrases consistently.
- c. in sentences inconsistently.
- d. in sentences consistently.

PL4 Target Sounds

PL4.1 Discriminates target sounds:
- a. in words inconsistently.
- b. in words consistently.
- c. in phrases inconsistently.
- d. in phrases consistently.
- e. in sentences inconsistently.
- f. in sentences consistently.

PL4.2 Produces target sounds in a structured situation:
- a. in words inconsistently.
- b. in words consistently.
- c. in phrases inconsistently.
- d. in phrases consistently.
- e. in sentences inconsistently.
- f. in sentences consistently.

PL4.3 Incorporates targets into spontaneous communication:
- a. inconsistently.
- b. consistently.

PRESENT FUNCTIONING LEVELS AND GOALS

FUNCTIONAL COMMUNICATION SKILLS (FC)

FC1 Mouth Movements

FC1.1 Does not match mouth movements.

FC1.2 Matches mouth movements.

FC1.3 Approximates mouth movements with consonant/vowel combinations:
- a. in syllables.
- b. in words.

FC1.4 Approximates mouth movements for words:
- a. in familiar phrases.
- b. in new phrases and sentences.
- c. during conversation.

FC2 Facial Expressions

FC2.1 Does not attend to facial expression of speaker.

FC2.2 Attends to facial expression of speakers, is aware that communication occurs through facial expression (smiling, frowning, etc.)

FC2.3 Exhibits appropriate facial expression:
- a. when expressing different emotions.
- b. when interpreting poetry/songs/stories.
- c. during conversational speech.

FC3 Conversational Strategies

FC3.1 Does not apply rules of turn-taking and good attending skills.

FC3.2 Applies rules of turn-taking and good attending skills.

FC3.3 Uses appropriate strategies for attracting the attention of deaf individuals, (i.e., waves hands, signs, taps person gently, turns lights on and off, taps surface, etc).

FC3.4 Uses appropriate strategies for attracting the attention of hearing individuals (i.e., calls name, vocalizes, waves, etc).

FC3.5 Selects appropriate conversational strategies depending on the hearing status of participants in the conversation and context of the situation, (i.e. sign, speech, gestures, or a combination of methods.

FC3.6 Uses appropriate repair strategies (i.e. repeating, rephrasing, demonstrating, changing communication mode).

FC3.7 Initiates, maintains, and ends conversations appropriately.

FC3.8 Uses appropriate conversational strategies for giving and receiving information via TDD or telephone.

a. Demonstrates understanding of basic components and operation of TDD/telephone.

b. Demonstrates understanding of abbreviations and telephone signals when conversing on the TDD or telephone. Applies them appropriately (e.g. GA, SK, busy signal, ringing).

c. Uses proper etiquette for the TDD or telephone.

KDES CURRICULUM GUIDE

FOR AUDITORY AND SPEECH TRAINING

UNIT VI. TEACHING ACTIVITIES AND MATERIALS

Once goals have been selected for classroom groups or individual students, the teacher may turn to this section to find activities and resources to use in helping the class or student achieve those goals. The activities are arranged in sequence and numbered to correspond to the lists of functioning levels and goals.

Activities are provided for the following categories:

Hearing Aid Use (HA)
Audition (A)
Speechreading (SR)
Phonetic Speech (PT)
Phonologic Speech (PL)
Functional Communication Skills (FC)

TEACHING ACTIVITIES AND MATERIALS

HEARING AID USE

Goal	Suggested Strategy	Materials
HA1	Uses Amplification	
	Demonstrate to the child a positive attitude about the hearing aid.	Down, M., Establishment of Hearing Aid Use: A Program for Parents
	Have the child put on the hearing aid during a pleasant part of the day.	Craig, H., et al., Your Child's Hearing Aid
	If the child initially accepts the aid, then rejects it, take it off immediately. Praise the child for wearing it; try again later.	
	Have the child decide on a special place to keep the aid and a special place to put it on. Make putting it on an exciting activity.	
	If child initially rejects the aid: o Try placing it on a favorite doll. o Use an egg timer to set limits for use of the aid, so the child can see a beginning and end for the process; gradually expand the time limit. o Try just the earmolds or just the aid alone first.	

HEARING AID USE

Goal	Suggested Strategy	Materials
HA2	Takes off Hearing Aid	
	Demonstrate the right way and the wrong way to remove a hearing aid. Reinforce taking the hearing aid off appropriately.	
	Designate a special place for each child to keep his or her hearing aid. Reward students to reinforce their acceptance of responsibility for placing aids where they belong.	

HEARING AID USE

Goal	Suggested Strategy	Materials
HA3	Puts on Hearing Aid	
	Demonstrate on a doll or a student volunteer how to put on the aid and jacket. Let students try putting hearing aids on each other, or the teacher.	doll
	Have an adult act as a model for putting on the aid.	
	Let students use a mirror, if appropriate, to put on aids and earmolds. (NOTE: This may further confuse some students.)	mirror
	Separate earmold from the hearing aid and allow child to practice putting on each part individually.	
	NOTES:	
	For young children, if the aid tends to fall off because of the small size of the ear, try using pink "hairnet" tape to keep aid in place. Or use two-sided toupee tape, which can be purchased at some hearing aid dealers or wig stores.	tape
	To guard against losing earlevel aids, try using nylon thread to tie the aid to a button on the child's shirt. If the aid falls off, it will not be lost.	nylon thread

HEARING AID USE

Goal	Suggested Strategy	Materials
HA4	Manages Hearing Aid Controls	
	Show students the on/off control for the hearing aid. Show functions of the controls.	
	Have students locate the on/off control and the volume setting on their aids or in a picture.	
	Have each student's volume setting posted in a place where the child can reach it.	
	Have the student practice turning the aid on and off while wearing it.	
	Have the student adjust the volume of the aid to a comfortable level.	

HEARING AID USE

Goal	Suggested Strategy	Materials
HA5	<u>Tests Hearing Aid Battery</u> Contact an audiologist or hearing aid dealer for information on where to obtain a battery tester. Every day, provide students with an opportunity to test their hearing aid batteries. Let students test battery types other than their own. Have each student listen to an aid through a weak battery and then again through a strong battery.	

HEARING AID USE

Goal	Suggested Strategy	Materials
HA6	Changes Hearing Aid Battery	
	Demonstrate the right way and the wrong way to put in a battery.	
	Discuss the concept of positive and negative. Show students how to match positive to positive when placing a battery in a hearing aid compartment.	

HEARING AID USE

Goal	Suggested Strategy	Materials
HA7	Cleans Earmold	
	Plan a routine time for earmold cleaning when the child can assist in cleaning.	pipe cleaners, etc.
	Show students an earmold that is blocked with debris. Demonstrate how to remove debris safely with a pipe cleaner.	
	Assign a classroom helper to clean the earmolds for the entire class.	

HEARING AID USE

Goal	Suggested Strategy	Materials
HA8	Knows Consumer Hearing Aid Information	
	Use students' hearing aids as the subject of a reading or writing lesson.	National Technical Inst. for the Deaf, Orientation to Hearing Aids.
	Explain to students why they should know about their hearing aids (in case it gets lost, needs repairs, etc.).	Craig, et al., Hearing Aids and You.
		Ear and Hearing Unit, Communication Lab, Kendall School

TEACHING ACTIVITIES AND MATERIALS

AUDITION

Goal	Suggested Strategies	Materials
A1	Awareness	
	Point out objects that make sounds and objects that do not.	Los Angeles County Superintendent of Schools. Auditory Skills Curric. Objective 1.1 - Activity .
	Play listening games with an adult so students can see that other people can listen.	Good Samaritan Hospital, Portland, Oregon. Parent-Infant Communication, p.3, Activity 3; p. 35-36, Activity 4, 5, 6.
	Encourage students to communicate when they hear sounds, (say "I heard that; point to ears, etc.).	
	Present different types of sounds (low pitch, high pitch, loud, soft). Document the types of sounds each child is consistently aware of, and circumstances in which child is aware (quiet, noisy, etc.).	Northcott, W., I Heard That! p. 4-10: strategies for providing listening experience to encourage auditory development
	Draw students' attention to sounds in the environment. Children need to know they are having a listening experience.	Boothroyd, A., et al. Auditory Training, p. 111, Activities 1-6. Ways to encourage a child's attention to sound.
	With students engrossed in play activities, reinforce the occurrence of sounds with such comments as, "I heard that," "Listen! That was loud," etc.	Anderson, S., et al., Activities for Auditory Learning Skills, p. 6. "Quiet Noises" activity to develop listening attitude Variations included.
	Give children common household items that make noise to play with. Draw attention to various sounds.	Sanders, D., Aural Rehabilitation, p. 252-260: describes auditory training for young children.
	Talk or sing to children when bathing, dressing, etc. Praise children when they show awareness of voice.	

Goal	AUDITION—Suggested Strategies	Materials
A1:	Awareness (continued)	
	Promoting a Conditioned Response:	Head, J., et al, Auditory Skills Curriculum, Preschool Supplement. North Hollywood, CA, 1986.
	For children less than two years old—	
	a. Introduce a sound you are sure the child can hear (loud drum). As sound is presented, flash light on/off. Call child's attention to light. Next, present the sound and see whether the child turns to the light. If so, reinforce by turning the light on.	1. Preparatory Activities A-O: 15 activities to: a. Encourage attention to sounds in environment. b. Stimulate use of voice
	b. Play Sleep/Wake Up with a doll or an adult model. Present a sound: the sleeping doll or adult wakes up. When the sound stops, subject goes to sleep. Once the child understands the concept, have child sleep/wake up in response to sound.	2. Obj. 1.1.1, Act. 1, 2: designed to encourage development of child's spontaneous awareness of sound.
	Note: Stimuli can be modified to help determine what sounds a child is aware of.)	3. Objective 1.1.3 Activity encourages sound localization.
	Promoting Development of a Structured Response to Sound:	Cassie, D., Auditory Training Handbook for Good Listeners, p. 19, "Off and On": Activity for sound awareness.
	For Children less than two—	
	a. Engage child in quiet play.	Los Angeles County Schools, Auditory Skills Curriculum:
	b. Produce sound stimulus (speech, noisemaker, etc.).	1. Objective 1.1.1., Activities 1-3. Spontaneous awareness of sound. Method to help children associate sounds and draw attention to sound. Variations and Materials list.
	c. Give positive reinforcement for any response (head turning, searching, smiling, etc.).	

Goal	AUDITION--Suggested Strategies	Materials
A1:	Awareness (continued)	
	For Children 2-4--	
	a. Place child in quiet room.	
	b. Allow child to watch production of sound (speech, noisemaker, etc.).	2. Objective 1.1.3., Activities 1-3. Assorted games and variations require children to search for or localize sound in the environment.
	c. Help child respond to sound: clap hands, put pegs in board, add block to bucket, raise hand, etc.	
	d. Give positive reinforcement.	
	e. Repeat, gradually phasing out assistance to child; eventually prompting only occasionally (i.e., nudge child's arm to signal time to drop block in bucket, etc.).	Good Samaritan Hospital, Portland, OR. Parent--Infant Communication, Activities 1, 2, 7, 8, 10, 11, 13, 14, 22, 41, 42, 44
	f. Keep repeating the procedure, phasing out visual component of stimulus until it becomes an auditory stimulus only.	Article: Rollins, J., "I Heard That! Auditory Training at Home," Volta Review, October 1972. Reprint #983, A.G. Bell Assn., Washington, DC
	g. Repeat the procedure, without assistance or prompting for response.	Association for Deaf, Washington, D. C.
	h. Reinforce correct responses only.	

Goal	AUDITION—Suggested Strategies	Materials
A2	Suprasegmental Features—Duration	
	Present the student with sounds that are similar in duration (ba vs. ba) and sounds of different duration (ba vs. bababa). Determine whether student perceives similarites and differences in the sounds.	Anderson, S., et al. Activities for Auditory Learning Skills, p. 18. "Feelings." Involves the ability to identify emotions based on sound.
	Present student with a sound. Determine whether student can itentify it as a long or short sound. If the students cannot verbalize a response, use a pictorial representation—long line/short line/broken line.	Stephens, E., et al., Be Ba Bo, p. 93. "Rhythm Clapping." activity involves ability to follow patterns of duration, intensity, etc.
A2	Suprasegmental Features—Intensity	
	Present student with sounds of similar and different loudness. Determine whether student perceives similarities and differences in the sounds. (Present BAAAA [loud] and baaaa [quiet]. Ask student if the sounds are the same or different.	Boothroyd, A., et al. Auditory Training. 1. p.97. Develop discrimination between suprasegmental features 2. p. 99, Activity 5. Exercise to develop discrimination between male and female voices.
	Present a sound, determine whether student can identify it as loud or soft. If necessary, use pictorial representations: loud—hands over ears quiet—finger to mouth ("shhh")	Northcott, W., ed., I Heard That!, p. 7. Activity E, to develop ability to imitate suprasegmental features.

Goal	AUDITION—Suggested Strategies	Materials
A2	Suprasegmental Features—Pitch	
	Present student with sounds of similar and different pitch. Determine whether student perceives the similarities and differences in these sounds. For example, present a low-pitched sound, then a high-pitched sound. Have student put a chip in the box marked "different."	Los Angeles County Auditory Skills Curric. 1. Obj. 1.3.1, Act. 1-3, asks students to identify long and short utterances; can help children recognize and comprehend sounds based on their duration.
	Present a sound; ask student to identify it as high or low. If necessary, use a pictorial representation, such as a tree or steps. The student should place an apple or doll high on the drawing for a high pitch, low for a low pitch.	2. Obj. 1.3.2, Act. 1-4. Requires discrimination between, recognition of sounds differing only in loudness.
A2	Suprasegmental Features—Intonation Patterns	
	Present sentences using a variety of intonation patterns. Ask student whether the speaker is happy, sad, mad, etc...	3. Obj. 1.3.3 requires discrimination between and recognition of sounds based on pitch differences. Includes many variations, such as discrimination among men's, women's, children's voices.
	Present a statement or a question. Ask student to distinguish between the two.	
	NOTE: For each suprasegmental feature presented, determine whether students can produce them in their expressive speech, as well as discriminating among them and identifying them auditorally.	4. Obj. 1.3.4, involves discrimination, recognition, comprehension of sounds based on differences of rhythm, stress, and intonation. Example: match sounds and emotions.
	(See activities listed for PT2 and PL2.)	

A2 Suprasegmental Features (continued)

Cassie, D. Auditory Training Handbook for Good Listeners:

1. p. 24. "Loud and Soft," activity based on musical instruments.

2. p. 27, 36, 37, 38, 40, 41; activities involving rhythm, songs, nursery rhymes, etc.).

3. p. 43; activity involving listening to voice quality for comprehension.

Head, J. Auditory Skills Curriculum, Preschool Supplement. Obj. 1.3.1, 1.3.2, 1.3.3, 1.3.4; activities related to discriminating between messages differing in duration, intensity, pitch, and stress patterns.

Goal	AUDITION--Suggested Strategies	Materials
A3	Non-Linguistic Sounds	
	When training students to identify non-linguistic sounds, group the sounds in categories likely to occur in the same environment (i.e., house sounds, farm sounds, school sounds), or sounds that are commonly confused (i.e., telephone, school bell).	Boothroyd, A., et al., Auditory Training Curric.
	If a student cannot identify a given non-linguistic sound in a specific situation, first find out if the child is aware of the sound ("Raise your hand when you hear the sound"). Then determine whether the child can distinguish the sound from other sounds being worked on ("Listen to these sounds and tell me if they are the same or different").	1. P. 94-96, activities for detection of environmental sounds. 2. P.99, Activities 1, 6; discrimination between environmental sounds. 3. P. 102, Activity 5; musical sounds. 4. P. 17, Activity 5; attention to environmental sounds.
	During training, start with a limited number of choices, which should be very different acoustically (chick, cow). Depending on the child's potential, gradually make the sounds more similar acoustically (check/duck/rooster).	Stephens, E., et al., Be Ba Bo, p. 91, Activities 2, 3. Recognition, sequencing of non-linguistic sounds.
	Show students how to respond to various environmental sounds: Answer the door when you hear a knock; Move out of the way if you hear an auto horn; etc.	
	Take young students for a walk around the school or home. Point out things that make sounds and things that don't. Let the students hear the noises things make.	

Goal	AUDITION--Suggested Strategies	Materials
A3	Non-Linguistic Sounds (continued)	
	Present various non-linguistic sounds auditorially, associated with pictures or objects. Ask the child to try to imitate the sound before identifying it. When training students to identify non-linguistic sounds, start with a set of only two items and increase the number, based on the child's age and auditory potential.	Cassie, D., Auditory Training Handbook: 1. P. 20, "Somebody Answer the Phone": exercise for environmental sound comprehension. 2. P. 22, 24, "Stop! Look! Listen!" and "Which Is It?": activities for identifying instruments Signs and Sounds published by Captioned films for the Deaf, Office of Education, Dept. of Human Resources, Washington, DC. Movie and recording of sounds in the environment. Los Angeles County Bd. of Ed., Auditory Skills Curriculum. 1. Obj. 1.2.1., Act. 2, Procedures and materials to help students discriminate between linguistic and non-linguistic sounds; where to find sounds. 2. Obj. 1.2.2., Act. 1-3, identifying environmental sounds. Activity variations, record sources. Anderson, S., et al., Activities for Auditory Learning Skills, p. 10-13. Activities for developing comprehension of environmental sounds. Lexington School f/t Deaf, Our Noisy World: tape and instruction booklet with 10 stories about common sounds.

Goal	AUDITION--Suggested Strategies	Materials
A4	Single Words	
	For words that are heard in isolation, students may be trained to listen to them in isolation. However, words that are usually heard in the context of sentences should be be learned in that context.	Good Samaritan Hospital, Portland, OR, Parent-Infant Communication, Act. 52-58, 61, 63, 67-69, designed to help children label common items in the environment.
	Preschool children should be exposed to words in categories: colors, numbers, classmates' names, animals, foods, classroom items, family members, body parts, etc.	Act. 78, listening for prepositions in sentences.
	Limit sets of words for training based on student potential: for children with limited hearing potential, work on 2-3 words, for children with significant hearing potential, try 10-15 words at a time.	Los Angeles County, Auditory Skills Curric. 1. Obj. 1.4.3., Act. 3; training children to recognize final words in sentences.
	Manipulate the acoustic characteristics of the response choice. Increase or decrease the ease of listening tasks. For example, it is easier for students to pick the word `pear' from a choice of pear, apple, or banana, than to pick the word `pear' from a choice of pear, plum, and grape. Change acoustic characteristics by changing initial sounds, intonation patterns, numbers of syllables, etc.	2. Obj. 1.4.4.; training children to listen for related words (categories) within sentences. Requires high level auditory functioning. 3. Obj. 1.5.1.; training children to recognize names and new words in sentences. Activity includes variations.
	As students grow older, use words from their academic subject areas.	
	Before starting any task requiring students to identify words, make sure they are comfortably aware of your voice.	4. Obj. 1.5.2., Act. 1-3; fine discrimination activities requiring students to recognize and discriminate between rhyming words in sentences.

Goal AUDITION—Suggested Strategies

A4 Single Words

If students have difficulty identifying particular words, try to find out if they are confusing them with other words often heard at the same time. It may not be realistic to ask the students to identify closely related words. For example: the words eye and ear may be perceived as the same to students learning to identify body parts.

Goal	AUDITION—Suggested Strategies	
A5	Familiar Phrases	
	During training, limit response choices to messages students are likely to hear in the natural environment.	Mahoney, D., Survival Skills, goals 1.30, 1.40: comprehension of familiar phrases, important in daily life.
	When students have difficulty identifying particular phrases, find out whether they are confusing it with similar phrases. It may not be realistic to ask students to identify such phrases. For example, "How are you?" and "How old are you?" may be perceived as the same.	Stephens, E., et al., Be Ba Bo, p.90: "Listen, Think and Do": auditory comprehension of commands, requiring motor response.
	List familiar phrases students hear in school or at home. Provide sets of pictures for students to use with the phrases. Students point to or place a chip on a picture in response to the appropriate familiar phrase.	Los Angeles County Auditory Skills Curric. 1. Obj. 1.4.1, developing comprehension of typical directions.
	Limit response choices based on the student's auditory potential. For a child with limited residual, present only 2-3 familiar phrases. For children with significant residual hearing, offer 10-15 choices.	2. Obj. 2.1.1., Act. 1-4. Many suggestions on how to train children to listen for one-part directions.
	The acoustic qualities of training choices in a response set can be varied to make the task easy or difficult. For example, it is easier for students to identify the phrase "sit down" from a choice of "sit down," "close the door," and "put on your hearing aid," then from a choice of "sit down," "lie down," and "get down."	Boothroyd, A., et al., Auditory Training: 1. p. 99, Act. 2-4: developing skills for sentence comprehension, including listening for names and following directions.
	Play "Bingo," using pictorial representations of familiar phrases. Have students listed for phrases and cover corresponding pictures on their cards. When a whole row is covered, the student has Bingo. Have students practice saying the phrases, focusing on various speech goals. (See PL3.2d, PL3.3b, PL3.4b, PL4.2d, PL5.2)	p. 101-102, Act. 1-3; activities for sentence comprehension: listening for names, following instructions, answering questions.

Goal	AUDITION—Suggested Strategies	Materials
A5	**Additional Materials**	3. P. 104-105, Act. 2-13; Skills for following instructions, including printing to body parts, telling time, understanding prepositions. Anderson, S., et al., Activities for Auditory Learning Skills: 1. p.6, "Do What I Say," activities for listening to instructions. 2. p.19, "Can You Follow the Command?" Activity to develop fine listening skills and ability to follow directions. Head, J., et al., Auditory Skills Curriculum, Preschool Supplement. Obj. 1.4.1., Act. 1, discriminating and identifying typical directions. Obj. 2.1.1., Act. 1, activity, variations on following directions.

Goal	AUDITION--Suggested Strategies	Materials
A6	Details	
	Ask students to identify pictures from cues that give two details of a message. Example: Stimulus: Find the girl running Choices: girl running, girl walking, boy running, boy walking Provide opportunities for students to follow directions requiring that they identify two details of a message. Example: Stimulus: Get the big ball. Choices: big ball, little ball, big car, little car Provide opportunities for students to identify increasing numbers of details in a message by adding more adjectives and adverbs. Example: Three Details Stimulus: Find the big red square. Choices: big red square, little red square, little blue triangle, big blue triangle. Example: Four Details Stimulus: Find the girl sitting and the baby sleeping. Choices: Girl sleeping, baby sitting; Baby sitting, boy sleeping; Baby playing, girl sitting; Girl sitting, baby sleeping.	Los Angeles County Auditory Skills Curric. 1. Obje. 2.1.2, Act. 1-4. Many suggestions on training students to listen for two critical elements in a message. Activities for pre-school to middle school 2. Obj. 2.1.3., Act. 1-4. Training students to listen for two critical elements in a message. Activities for pre-school to middle school 3. Obj. 2.1.4., Act. 1-4. Activities directed at training students to listen for critical elements in a sentence. Activities for pre-school to middle school 4. Obj. 2.2.1., Act. 1-6. Following directions that are less familiar and require listening for several elements. Activities for primary Middle School.

Goal	AUDITION—Suggested Strategies	Materials
A6	Details—Additional Materials	

Los Angeles County, Auditory Skills Curriculum:
5. Obj. 2.2.2., Act. 1-3; sequencing a series of multiple directions. Activities for Primary through Middle School.

Head, J., et al., Auditory Skills Curriculum, Preschool Supplement.
1. Obj. 2.1.2., Act. 1; Obj. 2.1.3., Act. 1; Obj. 2.1.4., Act. 1. Identifying two or more details in a message.
2. Obj. 2.2.1. & 2.2.2., Act. 1. Following multi-stage directions.

Goal	AUDITION--Suggested Strategies	Materials
A7	Connected Sentences	

Give students a choice of paragraph topics. Have students listen to the paragraph and select its topic from a list.

Example: You will hear a paragraph. Maybe it will be about the circus, maybe about the zoo; or maybe about the beach. Listen and tell me which one.

NOTE: Increase the choice of paragraph topics to make the listening task more difficult. For more advanced listeners, do not provide lists of possible topics.

Give the student some background information to listen for in a passage. Read the passage and test whether the student can identify the information. The background information can be provided via sign language, writing, speech, or any other modality.

Example: "You will hear a story about Mary's trip to the pet store. Tell me two animals that Mary saw."

- o For an easier task, choose a story that repeats the information several times.
- o Use a taped story; have student listen to the entire story and respond to questions presented at the end.
- o To make the task more difficult, don't ask questions about the story before students listen to it. Ask questions after the student has heard the passage.

Los Angeles County, Auditory Skills Curric.

1. Obj. 1.4.2.: training students to follow connected speech auditorially. Key words help the child follow along. For primary, middle school.
2. Obj. 1.4.3., Act. 1-2. Listening to stories and poems; for various age ranges and auditory functioning levels, preschool--intermediate
3. Obj. 2.2.3., Act. 3-4. Training students to identify the topic of two to three connected sentences. Example: I drive a truck; I put out fires. Who am I? Recommended for primary through middle school.
4. Obj.2.2.4, Act. 1.4 Listen to short stories and sequence three events. Vary auditory difficulty; add speech-reading cues. Primary through Middle School.

Waddy-Smith, Let's Hear a Story. Washington, DC: Outreach, Pre-College Programs, 1985.

Goal	AUDITION--Suggested Strategies	Materials
A7	Connected Sentences--Additional Materials	

Los Angeles County, Auditory Skills Curriculum (continued):

5. Obj. 2.2.5, Act. 1-5: Listening to, extracting information from longer passages. Students listen to recall five details of an event, story, or lesson. Activities can be modified for all ages, auditory functioning levels.
6. Obj. 2.2.6, Act. 1-4. Students listen, place five events in sequence. Appropriate for students with high-level auditory functions who need help with auditory memory.
7. Obj. 2.2.7, Act. 1-3. Students listen to connected passages, identify main idea, not just isolated events. Can use with auditory, speechreading cues, modify for all grade levels.
8. Obj. 2.3.1, Act. 1-9. Comprehending main idea of short conversation.
9. Obj. 2.3.2, Act. 1-8. Activities for pre-K--middle school, appropriate conversational responses. EX: teacher asks, "How are you?" Student says, "Fine." Includes suggestions for modeling appropriate conversational behaviors.

Head, J., et al., Auditory Skills Curriculum, Preschool Supplement,

1. Obj. 2.2.3., Act. 1: Identify an object from descriptive sentences.
2. Obj. 2.2.5., Act. 1; 2.2.6., Act. 1-2: Recalling details of a story or lesson.
3. Obj. 2.2.7, Act. 1: Understanding main topic of lesson or story.

TEACHING ACTIVITIES AND MATERIALS

SPEECHREADING

Goal	Suggested Strategies	Materials
SR1	Awareness of Speechreading	
	Draw students' attention to the fact that information can be obtained from the lips. (Point to your lips when you are talking).	
	Determine whether students can distinguish changes in lip movement. (See if they will copy your changes in lip movement).	
	Encourage the child to look at your face when communicating.	
	See Activities and Materials for FC1: Functional Communication/Mouth Movements; and FC2: Functional Communication/Facial Expression.	

Goal	Suggested Strategies	Materials
SR2	Single Words	
	Provide opportunities for students to speechread common vocabulary, grouped in topics for practice purposes. Possible topics may include: colors — numbers classmates' names — shapes foods — animals school items — toys Practice speechreading words in sentence context as well as in isolation. Words are viewed differently in isolation than when embedded in sentences. Increase the ease of speechreading tasks by limiting the choice of possible words the student will see. Example: "Maybe I will say blue or maybe I will say yellow. Watch and tell me which word I say."	Deyo, D., Speechreading in Context. Outreach, Gallaudet Pre-College Programs, 1984: a book of functional activities for developing speechreading skills. Mahoney, Don, Surviva Skills for the Deaf. Outreach, 1983. Workbook and videotaped activities focus on important terms to speechread in daily communication.

Goal	SPEECHREADING--Suggested Strategies	Materials
SR2	Single Words (continued)	
	Increase the number of choices as students' skills improve to make the task more difficult.	
	Increase the ease of speechreading tasks by choosing response choices that are visually different. For example, it is easy to speechread "red," from a choice of "yellow, red, and purple." It is harder when the choice is "red or green," which are very similar on the lips.	
	Provide continuing opportunities for students to speechread in the natural context of conversation, as well as in a structured environment.	

Goal	SPEECHREADING--Suggested Strategies	Materials
SR3	Familiar Phrases	

Note: Activities described as auditory can also be used to develop speechreading skills.

Provide opportunities for students to practice speechreading common phrases. For training purposes, group the phrases in messages likely to occur at the same time or place, for example:

Things you hear

- In the morning: get up; wash your face; brush your teeth.
- At school: line up; sit down; put on your hearing aid.
- On the playground be careful; walk, don't run; it's your turn.

Provide pictorial representations of common phrases on bingo cards. As students speechread the phrases, they cover the appropriate pictures with chips. The first student to cover a complete row has bingo.

To increase the ease of speechreading daily phrases, limit the choices to two or three phrases. Increase the difficulty of the task by increasing the number of choices.

Increase or decrease the difficulty of speechreading tasks by modifying the visual similarity of the choices available. For example: It is easier to speechread "Get your coat" from the choice of "Sit down," "Get your coat," and "Put on your hearing aid" than from "Get your coat," "Get your bag," and "Get your pencil."

Los Angeles County Auditory Skills Curriculum.

1. Obj. 1.4.1., Act. 1-3, For developing comprehension of typical directions. Creative variations described.
2. Obj. 1.4.4., Act. 1-3, Training students to listen for related words (categories) within sentences. Requires high-level auditory functioning.
3. Obj. 1.5.1., Act. 3,4, Training students to recognize names and new vocabulary words in sentences; activities and variations.

Mahoney, Don, Survival Skills (Outreach, 1982), Goals 1.30 and 1.40: comprehension of familiar phrases important for daily living.

Goal	SPEECHREADING—Suggested Strategies	Materials
SR3	Familiar Phrases — Additional Materials	
		Stephens, E., et al., Be Ba Bo, p. 90, "Listen, Think and Do." Training for auditory comprehension of commands. Requires a motor response. Boothroyd, A., et al., Auditory Training: 1. P. 99, Activities 2-4, developing sentence comprehension skills; listening for names, following directions. 2. P. 101-102, Act. 1-3 sentence comprehension: listening for names, following instructions, , answering questions. 3. P. 104-105, Act. 2-13 skills for following instructions: pointing to body parts, telling time, understanding prepositions.

Goal	SPEECHREADING--Suggested Strategies	Materials
SR4	Details in Sentences	

Provide opportunities for students to practice speechreading increasing numbers of details in a message.

Two details: Take a big step.

Choices: big step, little step,
big jump, little jump.

Three details: Take one big step
Choices one big step
two big steps
one little jump
two little jumps

Four details: Take a big step and a little jump.

Choices: big step, little jump
little step, little jump
little step, big jump
big step, big jump

For more details add adjectives, adverbs, names, etc.

Note: Activities listed as listening may also be used to practice speechreading.

Los Angeles County Auditory Skills Curric., Activities for preschool through middle school.

1. Obj. 2.1.2., Act. 1-4, Activities, variations train students to listen for two elements in a message.

2. Obj. 2.1.3., Act. 1-4, Training students to listen to several critical elements in a sentence.

3. Obj. 2.2.1, Act. 1-4, following directions that are less familiar and require listening for several elements.

4. Obj. 2.2.2, Act. 1-3, sequencing a series of multi-element directions.

Goal	SPEECHREADING—Suggested Strategies	Materials

SR5 Several Connected Sentences

Provide opportunities for speechreading a longer message. Read aloud a short passage, and have students guess the topic of the passage. To make the task easier, limit the choice of possible topics. To increase the difficulty, add possible topic choices. For example:

Passage:
Mary went to the food store. She bought ice cream, fruit, and potato chips. The man at the cash register put the food in a bag.

Topic Choices:

Easy	More difficult
food store	food store
zoo	candy store
	bank
	airport

Provide opportunities for speechreading a passage and answering questions about it. Give students the questions before reading the passage so they will know what to listen for.

To make the task easy, use a passage that answers the question several times during the reading. For example:

Question: What did the children do at the beach?

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1. Obj. 1.4.2.: Activities ask students to follow connected speech auditorially. Key words help students follow along. For primary, middle school.
2. Obj. 1.4.3., Act. 1-2, Students listen to stories and poems. For preschool-elementary students, various auditory levels.
3. Obj. 2.2.3., Act. 3-4, Ask students to name the topic of two-three connected sentences. Example: I drive a truck. I put out fires. Who am I? Primary—middle school levels.
4. Obj. 2.2.4., Act. 1-4, Listening to short stories, then putting three events in order. difficulty can vary. Speechreading cues can be added. Primary—middle school levels.

Goal	SPEECHREADING--Suggested Strategies	Materials
SR5	Several Connected Sentences (continued)	

Passage: Mike and Beth went to the beach. They played in the sand. They built castles in the sand. They used buckets and shovels to help them play in the sand.

Another way to make the task easier is to provide a choice of answers for the question.

Question: What did the children do at the beach?

Choices:
play volleyball
go swimming
play in the sand.

5. Obj. 2.2.5., Activities involve listening to, getting information from longer passages. Students listen to recall five details of an event, story, lesson Can be modified for use with all ages, auditory functioning levels.

6. Obj. 2.2.6., Act. 1-4, Students listen to a passage, then sequence five events. For students with high-level auditory function who need to develop auditory memory.

7. Obj. 2.2.7., Act. 1-3, Listening to connected passages, understanding the main idea rather than individual details Can use auditory and speechreading cues, modify for preschool through middle school.

8. Obj. 2.3.1., Act. 1-6, Comprehending the main idea of a short conversation.

TEACHING ACTIVITIES AND MATERIALS

PHONETIC SPEECH

Goal	Suggested Strategies	Materials
PT1	Spontaneous Vocalizations	
PT1.1	(Not applicable.)	
PT1.2	Encourage Vocalization During Stimulated Activities	
	Play peek-a-boo, encourage laughter and vocalization. Acknowledge and reinforce acceptable vocalizations from the student.	
	Imitate spontaneous babbling with lots of facial expression; encourage children to babble.	Voice light
	Engage in games that produce vocalization naturally, such as tickling, or pushing heavy objects.	
	Use play telephones to encourage students to vocalize on the telephone.	Play telephone
	Stack plastic cubes, then push them over. Use a surprised expression and vocalize: "Oh, oh," then let child do same thing.	Plastic stacking cubes.
	Use any toy that can be manipulated to correspond to or reinforce a vocalization.	Oscar the Grouch inside his trash can, Humpty Dumpty, any pop-up toy; rubber ball, jump rope.
	Place cake decoration beads, coffee grounds or similar materials on paper plate. Place plate on vibrator, then vocalize into microphone. Show child how the vocalization affects the movement of the beads.	Vibro-Tactile Stimulator /Microphone (Siemen's Phonator); paper plate; cake trim, coffee grounds, or similar materials.
	Use suggested therapy techniques described in Auditory Skills Curriculum- Preschool Supplement.	Head, J., et al., Auditory Skills Curriculum, Preschool Supplement: Act. 3.11, 1 & 2, vocal play.

Goal	PHONETIC SPEECH--Suggested Strategies	Materials
PT1	Spontaneous Vocalizations (continued)	
PT1.3	Voice on Demand	
	Have children feel vibrations of the vocal folds as the therapist vocalizes. Then have children vocalize, feel the vibrations of their own throats.	
	Use a row of beads for stringing, and a string knotted at one end. Give child one bead to string for each vocalization.	Beads for stringing, knotted string.
	Using blocks, let children stack one block for each vocalization until the stack falls. Or therapist and child can take turns producing vocalizations and stacking blocks.	Building blocks
	Hold microphone next to your mouth and vocalize. Move the microphone next to child's mouth to signal request for vocalization.	Microphone (real or toy)

Goal	PHONETIC SPEECH--Suggested Strategies	Materials
PT2	Suprasegmental Features	
PT2.1	Duration	
	Use a ball of yarn or string. Have the child unroll different lengths while sustaining vocalization. You decide whether the vocalization to be produced should be long or short. (The longer the string, the longer the vocalization.)	Ball of string or yarn
	Using a cake and a tube of icing, ask the child to squeeze a long or short line of frosting, while simultaneously vocalizing. Bonus: when the activity is finished, the students can eat the cake.	Cupcakes or large cake, tube of icing.
	Have the child imitate vocalizations and vocalization patterns presented by the therapist for a specific number of seconds. Use a stopwatch or egg timer to time the vocalizations. See Head, et al., Activity 3.2.2, #1.	Stopwatch or egg timer Head, et al., Auditory Skills Guide, Preschool Supplement. Act. 3.2.2., #1, phonetic duration.

Goal	PHONETIC SPEECH—Suggested Strategies	Materials
PT2.2	Suprasegmental Features: Intensity	
	Play Sleep/Wake-Up Game: Encourage the child to put a doll or the therapist to sleep using a quiet voice, and to wake up the doll or the therapist with a louder voice. Meaningful words are not required, only appropriate intensity level.	Doll or toy called "Little Bopper," activated by loud voices only.
	Instruct students to increase their vocal intensity so they may be heard as the therapist moves farther and farther away.	
	c. Select familiar characters from stories. Use different intensity or pitch patterns to produce vocalizations that represent the characters.	Three Bears Billy Goat Gruff Three Pigs
	d. See Head, et al.	Head, J., Auditory Skills Curriculum, Preschool Supplement. Obj. 3.2.3., Act. 1, modifying vocal intensity.

Goal	PHONETIC SPEECH—Suggested Strategies	Materials
PT2.3	Suprasegmental Features: Pitch	
	Demonstrate production of high and low pitch. Place the student's hands on your larynx to feel its movement as you change pitch. Then ask the student to produce a high and a low pitch while feeling the movement of his or her own larynx.	
	Label a picture of a ladder—HIGH at the top and LOW at the bottom. Give the student a toy or marker and tell the student to climb the ladder using his or her voice. The student should produce a higher voice with each move up the ladder, or a lower voice with each move down the ladder.	A picture of a ladder, marker or small toy to place on the ladder.
	See PT2.2. Activity C. See Head, et al.	Head, et al., Auditory Skills Curriculum, Preschool Supplement. Obj. 3.3.3., #1, modifying vocal pitch.

Goal	PHONETIC SPEECH--Suggested Strategies	Materials
PT2.4	Suprasegmental Features: Stress Patterns	
	Clap or tap out various stress patterns using nonsense syllables. Vocalize and clap or tap louder or more visibly for stressed syllables. Students should reproduce the pattern. At first they may only clap out the pattern, then they should clap and vocalize the stress pattern correctly.	
	Use different sized blocks--large for nonsense syllables to be stressed, small for syllables that are unstressed. Arrange the blocks to depict different stress patterns. You might model the pattern orally, then have the student imitate it, emphasizing the appropriate syllables (blocks). Fade the oral model and have the student produce the pattern orally, using only the arranged blocks as cues for the stress pattern. The activity can be modified using tactile cues; for instance, rough scraps of material for stressed syllables, smooth material for unstressed syllables.	Different sized blocks (or smooth and rough material)
c.	See suggested techniques in Head, et al. Auditory Skills Curriculum - Preschool Supplement.	Head, et al., Auditory Skills Curriculum, Preschool Supplement. Act. 3.3.4., #1: encouraging modification of stress patterns.

Goal	PHONETIC SPEECH--Suggested Strategies	Materials
PT3	Specific Target Sounds	
PT3.2	Target Sounds Development	
	Have students discriminate between correct and incorrect production of targets.	Arizona St. School for the Deaf & Blind, Speech Guide for Teachers & Clinicians of the Hearing Impaired.
	After students can produce their target sounds correctly and consistently, let them use negative practice (i.e., first produce the sound incorrectly, then correctly) to contrast correct and incorrect production of targets.	
	Produce a variety of nonsense syllables, some with and and some without the target sound. Ask students to indicate when syllables containing their sounds are produced.	
	Use suggested therapy techniques described in Speech and the Hearing-Impaired Child: Theory and Practice, by Daniel Ling (Chapters 13 - 18).	Ling, Daniel, Speech and the Hearing Impaired Child: Theory & Practice, see references.
f.	Use suggested therapy techniques described in Speech and Deafness by Donald Calvert and Richard Silverman (Chapters 4 & 5).	Calvert & Silverman, Speech and Deafness, Chapters 4 & 5, see references.

Goal	PHONETIC SPEECH--Suggested Strategies	Materials
PT2	Specific Target Sounds (continued)	
PT3.3	Good Voice Quality	
	Nasality	
	Have students use exaggerated mouth movement when producing nonsense syllables, to decrease nasal quality. Also use tactile cues: have students feel their noses to check vibration of the nasal cavity, for feedback. As production improves, fade out exaggerated mouth movements and tactile feedback.	
	Have the student touch your nose to feel vibration as you alternate production of non-nasal and nasal sounds. Have students try to imitate you while touching their own noses to feel the difference.	
	Breathiness	
	Use the "Pushing Approach" described in The Voice and Voice Therapy, by Boone.	Boone, Daniel, The Voice and Voice Therapy. See references.
	Use exertion exercises described in Speech and the Hearing Impaired Child: Theory and Practice, by Daniel Ling.	Ling, Daniel, Speech and the Hearing Impaired Child: Theory and Practice
	Have students hold their breath just before pulling a rope or lifting a stack of heavy books. When they pull or lift, have them exhale, to produce a strong vocalization.	Rope or stack of books.

Goal	PHONETIC SPEECH--Suggested Strategies	Materials
PT3	Specific Target Sounds (continued)	
PT3.3	Good Voice Quality (continued)	
	Harshness	
	Have students produce different syllables, each beginning with "h," and emphasizing soft, smooth, easy voice.	
	Have students produce nonsense syllables in a whisper. Ask them gradually to increase the intensity of the production while continuing to emphasize smooth, easy voice.	
	Use the "Yawn-Sign Approach" described in The Voice and Voice Therapy, by Boone, using vocalization and nonsense syllables.	Boone, Daniel, The Voice and Voice Therapy. See references.

TEACHING ACTIVITIES AND MATERIALS

PHONOLOGIC SPEECH

Goal	Suggested Strategies	Materials
PL 1	Spontaneous Vocalizations	
PL1.1	(Not Applicable)	
PL1.2	Vocalizes For Communication Purposes	
	Encourage spontaneous vocalization in appropriate situations by acknowledging and reinforcing them immediately. Use role play or use puppets to set up situations (e.g. an emergency situation in which students must vocalize; or in which they need to gain attention).	Puppets
	b. See suggested activity in Head, et al.	Head, J., et al., Auditory Skills Curriculum Preschool Supplements: Act. 3.1.2., #1, Encouraging spontaneous phonologic communication.
PL1.3	Responds to Directed Vocalization With Vocalization	
	Select everyday situations in which verbal responses are required. For example, have the child vocalize when someone says hello or goodbye.	
	Encourage the child to vocalize when asked to name familiar objects.	

Goal	PHONOLOGIC SPEECH--Suggested Strategies	Materials
PL2	Suprasegmental Features	
PL2.1	Intensity	
	Set up role play activities in which students must use appropriate loudness. For example, have the student whisper a secret so others cannot hear; talk to someone in a noisy place.	
	Have the student read or retell stories that require variations in loudness such as The Three Bears or Three Billy Goats Gruff.	Story books containing The Three Bears, Three Billy Goats Gruff.
	Have students monitor their voices during quiet, loud, or conversational speech using a voice light or video-articulator for visual feedback.	Voice light or video-articulator.
	See Objective PT2.2: "Sleep/Wake Up" Relate the activity to a meaningful	See variations of "Sleep/Wake Up" in Head, et al., Auditory Skills Guidelines, Preschool Supplement, Act. 3.2.3. #2.
PL2.2	Pitch	
	Have students produce words, short phrases, or sentences while monitoring the appropriate pitch range by feeling their larynxes. The larynx should be somewhat lowered for low pitch, raised for higher pitches. Fade tactile cues.	List of words, short phrases and sentences, Phonetic Context Drillbook (see reference). See References.
	Teach students the difference between production of low- and high-pitch sounds by feel. Have them feel vibrations made in the chest by low-pitch sounds, then lack of chest vibrations when high-pitch sounds are made.	
	Use Activity 2.1b, focusing on variations in pitch instead of loudness. For example, retell The Three Bears using a low voice for Papa Bear, medium pitch for Mama Bear, and high pitch for Baby Bear.	Head, et al., Auditory Skills Guide, Preschool Supplement, Act. 2.1.b., #1, developing pitch phonologically.
	See suggested activity in Head, et al.	

Goal	PHONOLOGIC SPEECH--Suggested Strategies	Materials
PL2	Suprasegmental Features (continued)	
PL2.3	Duration	
	Provide opportunity for negative practice by selecting words or phrases in which the student prolongs vowels. Have student produce the words or phrases with excessive prolongation of the vowel, then repeat the words with appropriate prolongation. Practice until student can switch from appropriate to inappropriate productions.	
PL2.4	Intonation	
	Have the student sing familiar songs or recite familiar nursery rhymes using appropriate duration, intensity, and intonation patterns, and approximating the words.	Books containing familiar nursery rhymes and poems.
	Have students practice "nonsense talk." Select pictures related to emotions. Demonstrate duration, intensity, intonation patterns, using "nonsense" words associated with those emotions.	Pictures of happy, sad, excited, angry (etc.) facial expressions.
	Use suggested activities for improving use of inflection and expression, as described in the Speech Development Curriculum Series.	Clarke School f/t Deaf, Speech Development Curriculum Series, 1971.
	Demonstrate intonation patterns for a sad or happy voice, etc. Have students produce words, phrases, or sentences using the correct intonation pattern for expressing various emotions.	Pictures of facial expressions--happy, sad, etc.

Goal	PHONOLOGIC SPEECH--Suggested Strategies	Materials
PL2	Suprasegmental Features (continued)	
PL2.5	Voice Quality	
	Nasality	
	Have students use exaggerated mouth movements for producing words, short phrases and sentences. Fade out exaggerated movements when acceptable voice quality is achieved.	
	Breathiness	
	Use exertion exercises as described in Speech and the Hearing Impaired Child: Theory and Practice, by Daniel Ling.	Ling, Daniel, Speech and the Hearing Impaired Child Theory and Practice.
	Use exertion exercises as described in The Voice and Voice Therapy, by Daniel Boone.	Boone, Daniel, The Voice and Voice Therapy (see references).
	Have students increase loudness levels to produce a stronger, more resonant voice for words, short phrases, and sentences. Then decrease loudness to establish acceptable voices.	See references for books with lists of words, short phrases, sentences.
	Harshness	
	Use the "Yawn-Sign Approach," described in the Voice and Voice Therapy.	Boone, Voice and Voice Therapy (see references).
	Have students whisper to produce words, phrases, and sentences. Have them gradually increase the intensity of production, continuing to emphasize smooth, easy voice.	See references for books with words, short phrases, and sentences.
	Have students produce words, phrases, and sentences in a tense, hard voice, then change to an easier, relaxed voice to to compare correct voice production.	

Goal	PHONOLOGIC SPEECH--Suggested Strategies	Materials
PL3	Syllables	
PL3.1	Discrimination of Syllables	
	Introduce the general rules for syllabication and have students apply them.	Series: The New Phonics We Use, Vol. C, D, & E. See references.
	Have students use the dictionary to determine the numbers of of syllables in words.	Dictionaries
	Have students watch and listen as the teacher produces words, phrases, and sentences. Ask students to determine the correct number of syllables produced. Use other auditory and visual cues, such as clapping, at first, then fade the extra cues.	30,000 Selected Words, (word lists organized by numbers of syllables, lists of phrases and sentences of increasing length.
PL3.2	Production of Correct Number of Syllables	
	Have students clap or tap out the correct number of syllables as they say them in words, phrases, sentences.	Same materials as 3.1.
	Have students mark or number the syllables in words, phrases, and sentences of increasing length, and practice producing them.	

Goal	PHONOLOGIC SPEECH--Suggested Strategies	Materials
PL3.3	Syllables: Appropriate Stress	
	Highlight the syllables that should be stressed in words, or words that should be stressed in sentences, by capitalizing or color coding them. Have students read or produce the highlighted syllables or words with greater emphasis.	Auditory Skills Instructional Planning System, Vol. 1. The Teaching of Speech. The New Phonics We Use, Books C, D, and E. Speech Development Curriculum Series, 1971. (See references for above)
	While producing words, phrases, or sentences, clap or tap out stress patterns, using louder or more highly visual claps or taps for words or syllables that are stressed. Have students produce the same words, phrases, or sentences, first indicating stress correctly by clapping or tapping, then with speech alone.	
PL3.4	Appropriate Rate and Phrasing	
	Emphasize proper phrasing of words in phrases and sentences, along with good breath control (sustained, even flow of breath, exhalation) during production.	A Workbook in Speech Therapy, activities for phrasing (see references).
	Use slash lines (/) to indicate words that should be grouped together in speech.	

Goal	PHONOLOGIC SPEECH--Suggested Strategies	Materials
PL4	Specific Target Sounds	
PL4.1	Discrimination of Target Sounds	30,000 Selected Words
	Have students recognize sounds in written words, phrases, sentences.	Phonetic Context Drillbook
	Have students determine whether words contain their target sounds when produced by the therapist as isolated words, phrases, sentences.	The Big Book of Sounds Jeffers, Janet, Speechreading (Lipreading) for minimal paired words.
	Have students identify target sounds in "minimal pairs" (words that differ by only one sound). If, for instance, the target sound is "p," you might present the words "pill" and "fill." Students can also be asked to identify target sounds in phrases and sentences.	See references for above.
PL4.2	Production of Target Sounds	Same materials as 2.12.
	Have students repeat or read words, phrases and sentences containing target sounds.	Sourcebook of Articulation Learning Activities. Games Kids Like. More Games Kids Like. See references.
	Let students use picture cards or written words containing target sounds to play games: Go Fish, Concentration, etc. To win, students must produce their sounds correctly in words, phrases or sentences.	
	Use the activities described in Sourcebook of Articulation Learning Activities, Games Kids Like, and More Games Kids Like.	
	Have students develop their own "word boxes." They find or write down words containing their target sounds, and keep them in a box for practice.	File boxes or small covered cardboard boxes.

Goal	PHONOLOGIC SPEECH--Suggested Strategies	Materials
PL4	Specific Target Sounds	
PL4.3	Targets in Spontaneous Communication	
	Monitor students' speech during spontaneous speaking situations for correct production of target sounds.	
	Have students retell stories loaded with their target sounds.	Programmed Articulation Carryover Stories.

TEACHING ACTIVITIES AND MATERIALS

FUNCTIONAL COMMUNICATION SKILLS

Goal	Suggested Strategies	Materials
FC1.	Mouth Movements*	
	(Mouth movement activities should be taught even when voice quality is poor.)	
	Using a picture board of different mouth positions and matching picture cards, have students match mouth positions pictured on the cards to those on the picture board.	Picture board and cards picturing matching mouth movements.
	Present different mouth movements for the student to emulate. As a last resort, let students use a mirror to help approximate mouth movements.	Mirror
	Use pictures representing familiar words or phrases, and ask student to approximate the mouth movements. Pictures may be lined up on a Bingo card. Students who approximate mouth movements for four pictures in a row win the game.	"Familiar Phrases" Bingo, available from KDES Communications faculty.
	Have students repeat or read words, phrases, sentences presented by the therapist, using correct mouth movements.	Blockolsky, 30,000 Selected Words. Griffith, Phonetic Context Drillbook. Flowers, Big Book of Sounds. Jeffers, Look, Now Hear This. (See References.)
	Ask students to retell stories or tell events of their day, using appropriate mouth movements for words.	Story books, film loops
	* If children are not ready for these activities, play "follow the leader" to encourage imitation of gross motor activities.	

Goal	FUNCTIONAL COMMUNICATION--Suggested Strategies	Materials
FC2.	Facial Expressions	
	Ask students to identify various emotions from the therapist's facial expressions.	
	Show pictures of various emotional states--angry, sad, happy, etc.-- and ask students to assume facial expressions appropriate to those emotions.	Pictures of faces expressing various emotions.
	Have students role-play or mime a variety of situations (getting a new bike, losing a favorite toy, etc.). Watch for appropriate facial expressions.	
FC3	Conversational Strategies	
FC3.2	Applies rules for turn taking and good attending skills.	
	Set up different role play situations in which students must identify their own turns in conversations, and ways of giving turns to other participants.	Deyo & Hallau, Communicate With Me
	Example: The teacher is talking to you about your paper. The teacher looks down to read something from the paper. Is it your turn to speak to the teacher?	
FC3.3. FC3.4	Gets the attention of a deaf or hearing person.	
	Set up a series of role-play situations in which students must select appropriate auditory, visual, or tactile cues for getting someone's attention.	Deyo & Hallau, Communicate With Me
	Example: The teacher is across the room helping another student. How do you get the teacher's attention if she is deaf? If she is hearing?	

Goal	FUNCTIONAL COMMUNICATION--Suggested Strategies	Materials
FC3.5	Appropriate Conversational Strategies	
	Set up a series of role-play situations in which students must select the best possible communication methods. Example: The class has a visitor who is hearing but who knows how to sign. How can a deaf student best communicate with the visitor?	Deyo & Hallau, Communicate With Me
FC3.6	Repair Strategies	
	Discuss various repair strategies and set up role-play situations for using them. Example: You say to the clerk in the drugstore, "I need a new brush." The clerk says, "What?" What can you do?	Deyo & Hallau, Communicate With Me
FC3.7	Initiate, Maintain, and End Conversations	
	Role-play a variety of situations in which students must assume responsibility for starting, maintaining, or ending conversations.	Deyo & Hallau, Communicate With Me
FC3.8	Use Appropriate Conversational Strategies on the Telephone and TDD	
	Use activities described in Ring/Flash, by David Deyo.	Deyo, David, Ring/Flash Telephone Skills for Deaf and Hard-of-Hearing Students. See Appendix XX.

KDES CURRCIULUM GUIDE

FOR AUDITORY AND SPEECH TRAINING

UNIT VI. REFERENCES

UNIT VI. REFERENCES

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KDES CURRICULUM GUIDE

FOR AUDITORY AND SPEECH TRAINING

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APPENDIX A.

AUDITORY AND SPEECH SERVICES AT THE KENDALL SCHOOL

The Kendall Demonstration Elementary School is divided into four instructional departments: Preschool (birth to three years), Primary (six to nine years), Intermediate (ages 10 to 11), and Middle School (ages 12 to 15). The school employs two audiologists to serve the students in those four departments. One audiologist works with the Preschool and Primary departments; the other with Intermediate and Middle School students. Each department is also served by a communication specialist for speech. The audiologists and communication specialists also serve students in the school's Special Opportunities Program, designed for students with special academic needs.

The audiologists are primarily responsible for annual audiologic evaluations, hearing aid evaluations, evaluations of auditory and speechreading functions, development of auditory and speechreading IEP goals, and providing help for classroom teachers in implementating student goals. Auditory and speechreading evaluation and goal setting are based on a hierarchy of skills ranging from awareness to comprehension of sound and speechreading information.

The communication specialists for speech are responsible for evaluation and development of student speech skills. They are also responsible for facilitating the implementation of auditory and speechreading goals. The methods used at KDES for evaluation and development of speech skills are based on Daniel Ling's system for teaching speech to hearing impaired students, as detailed in his book, Speech and the Hearing Impaired Child: Theory and Practice. The speech specialists evaluate each student twice every year: once in the fall for initial goal setting, and again in the spring for evaluating progress toward those goals.

The underlying theme of the auditory and speech program at KDES is the greatest possible integration of oral and aural training throughout each child's classroom work and daily communication. The role of the audiologists and communication specialists is to help teachers become skilled in understanding their students' auditory and speech communication skills, then helping them set appropriate goals and find effective strategies to accomplish those goals. Audiologists and speech specialists also provide individual and small-group therapy as an integral part of the program.

Finally, the communication specialist for speech is responsible for monitoring daily hearing aid checks. Each morning the specialist, with the aid of classroom teachers, performs a listening check with each child. The test employs Dr. Ling's five-sound test and a visual inspection of hearing aids to detect any malfunctioning parts.

The implementation of auditory and speech services at KDES varies by academic department, based on the needs, functioning levels, ages, and priorities of individual students.

Tailoring Services for the Preschool Department

The Preschool program at Kendall is divided into three components: the Parent/Infant Program (for families with children from birth to age two), the Younger Playroom (ages two to four), and the Older Playroom (ages four and five). Because the students are very young, the specialists use games, pictures, and a variety of three-dimensional objects to enhance work on speech skills.

The communication specialist for speech and the audiologist also provide group services to students in the Parent/Infant Program once a week. Teachers and instructional aides in the program assist with those activities. The sessions are used to demonstrate speech and auditory activities that Parent/Infant teachers can then incorporate into home visits. The group sessions also provide a regular opportunity for the specialists to monitor the children's progress. For infants who do not participate in group sessions, the specialists serve as a teacher resource.

The Ling speech development system is an integral part of the Preschool program. Classroom drills are completed at least twice a day, and teachers work with the speech specialist on a regular basis to explore ways of integrating auditory, speechreading, and speech production training into daily activities. Some students participate in individual or small-group therapy once or twice a week. The speech specialist also helps classroom teachers set up learning stations for auditory and speech training, directs weekly musical activities for students in the Older Playroom, and monitors activity books that are sent home for parents to assist with development of communication skills.

Building Skills in the Primary Department

In the Primary Department, the communication specialist for speech works with each student directly once a week in classroom groups. The sessions are led by the speech specialist and the classroom teacher. These group activities focus on integrating speech production, speechreading, and auditory skills into regular classroom routines.

Additional therapy is provided on request through individual or group sessions structured to enhance the skills (speech production, speechreading, or audition) in which students show greatest potential. Small group and individual sessions stress functional skills for daily living. Reading and writing, as well as listening and speaking skills, are emphasized in the sessions. Dramatizations, role-play, mime, and choral recitations are also an important part of the program, and have been found effective in building students' self confidence. Finally, the communication specialist for speech works with other professionals, including the sign language specialist, as needed.

Integration of Skills at the Intermediate Level

The focus of the speech and auditory program in the KDES Intermediate Department is on integrating speech, auditory training, speechreading, and communication strategies within students' academic activities. Students work on their own specific speech targets in the context of classroom activity. Speechreading, the use of orthography with articulation drills, and phonics skills are also emphasized. Such classroom materials as vocabulary lists, stories, poetry, reading and language books are incorporated into the speech program to encourage carryover of communication skills.

Although Intermediate level teachers are not given specific speech drills to work on with students, they are alerted to reinforce production of target sounds and to integrate other communication strategies into classroom work. The communication specialist for speech sees intermediate-level students individually or in small groups once or twice each week to work on IEP goals.

Student Input in the Middle School

In Kendall's Middle School, auditory and speech training are scheduled and taught as academic subjects. Goals set up for individuals and groups are based on input from students, classroom teachers, and the communication specialist for speech. Students are actively involved in the selection of strategies to meet their own needs, and in recording their own progress.

The auditory and speech program at this level is more analytical, using phonics in conjunction with Ling principles. Many speech activities are performed on Apple computers. Students are encouraged to incorporate what they learn through these approaches into their everyday living as well as into the academic areas of reading, spelling, writing, and spoken language.

APPENDIX B

HOW TO CHECK THE HEARING AID

A complete check of student amplification should address the three areas discussed below:

- o Is this hearing aid set appropriately for my student?
- o Is this hearing aid functioning properly?
- o How does the student function with the hearing aid?

Is this Hearing Aid Set Appropriately for My Student?

To assure that each student has the appropriate hearing aid, and that the aid is properly set for the student, the teacher should obtain the following information from the student's audiologist or audiological records:

- o Brand and model of aid.
- o Internal settings (if any).
- o Recommended volume for student.
- o Battery type.

After collecting this information for each student, the teacher may find it helpful to maintain a class inventory of hearing aid information. With a quick glance, each student's aid can be checked daily to be sure it is set as recommended.

Is this Hearing Aid Functioning Properly?

It is also important to check whether all parts of the hearing aid—including the earmold, battery, cords, and receivers—are in good working order. This second checking routine concerns how the aid looks and sounds. Two pieces of equipment can be purchased for the classroom to assist in this process: a stethoscope and a battery tester.

The stethoscope allows the teacher to listen to students' aids without the need for an earmold. A fairly good stethoscope costs about $12 to $14, and can be purchased through most hearing aid dealers. The battery tester is another helpful tool for both teachers and students. Depending on classroom needs, testers range from simple light indicators to more complex voltage readers. Battery testers cost from $3 to $25; they are available from hearing aid dealers or commercial outlets, such as Radio Shack.

Use the folowing steps for checking each hearing aid. Students should be encouraged to perform as many of the steps as possible themselves.

Visual Check

_____ 1. Test and replace batteries as necessary.

_____ 2. Check battery compartment for corrosion.

_____ 3. Check controls for ease of movement.

_____ 4. Check microphone area for debris.

_____ 5. Check receiver for dirt, cracks, and moisture

_____ 6. Check cord for frayed areas and broken prongs.

_____ 7. Check earmold for breaks, rough areas, and wax or dirt in the canal.

Listening Check

_____ 1. Listen for distortion.

_____ 2. Listen for intermittency and static as the volume is changed.

_____ 3. Listen for intermittency as the cord is jiggled.

_____ 4. Check the seal between the earmold and receiver by placing a finger over the sound channel of the mold during feedback. If the feedback stops, the seal is good.

How Does the Student Function with the Hearing Aid?

In addition to checking the functions of the hearing aid, it is also beneficial to check how well the student listens with the aid. Many programs recommend using the five-sound test, pioneered by Daniel Ling. This check involves presentation of five sounds--aa, oo, ee, sh, and s--at a consistent distance, usually about three feet. (These five sounds are considered representative of the different areas of the frequency range important for understanding speech).

Students should indicate their awareness of the sounds by raising their hands, clapping, dropping a block, etc. Obtaining a baseline of sounds each student is aware of, then monitoring changes in performance on this task, can help teachers detect such problems as middle ear disorders, fluctuations in hearing levels, or malfunctioning hearing aids.

Of course it is best if the teacher can perform both a physical check of hearing aids and a listening check on each student. But if time is short, and only one test can be completed, it is best to do a listening check with students wearing their aids. If a problem is found during this check, further checks can determine whether the difficulty lies with the aid or with the student's hearing.

The time needed to check hearing aids every day will vary, based on the age of the students and the size of the class. For example, in a preschool class of four children, it may take up to a half hour to complete the check. Preschool teachers report, however, that this can be valuable educational time, beyond the need to check the hearing aids. It is an opportunity to teach such general skills as taking turns, sequencing of tasks, and responsibility, as well as auditory skills.

Teachers of primary age children state that the hearing aid check may only take five to ten minutes for a class of five students, as the students themselves can perform most steps of the process. This is not too much time to devote to assuring adequate amplification.

Responsibility for maintaining the hearing aid in good condition depends on the ages and needs of the students involved. In a class of younger children, primary responsibility for hearing aid use and maintenance may rest with the teacher, but every effort should be made to educate students towards independence in this area. Many preschool students are not too young to take part in the process of caring for and checking their own aids. While full responsibility for maintaining the aid may not be assumed for several years, learning to care for their aids as early as possible can facilitate students' independence and lighten the teacher's load of responsibilities.

APPENDIX C

THE KENDALL COMMUNICATIVE PROFICIENCY SCALE

The child is able to determine what another person is talking about by looking in the same direction as the other person. Although the child does not use words, he communicates about his own comfort, pleasure, and distress. The child also communicates about things, such as clothing, that are associated with his person and upon which he can act. He responds attentively to turn-taking activities (such as peek-a-boo) but does not initiate the activity. The child requests objects by reaching and sometimes opening and closing the fists. He calls attention to novel elements in the environment by holding them up for others to see or by pointing. His primary forms of communication include stretching and holding gestures, facial expressions, and differentiated cries. 0+

The child refers to objects by holding them, looking at them, pointing, and touching. As the child crawls and walks, she communicates about many objects, especially toys, lights, animals, and particular foods. The child initiates peek-a-boo and participates in other turn-taking activities, such as handing objects back and forth. She imitates the movements of others, but not necessarily to bring about the actions of others. She uses non-verbal means to call attention to her physical needs and to express personal reactions. The child uses similar movements to O+, but shifts her gaze back and forth between the object and the person whose help she wants in getting the object. By P-1+ the child imitates signs produced by others, although her hand configurations and movements may be imperfect. She may use a few idiosyncratic signs with consistent meaning. P1

P1+

The child uses single words or signs to talk about actions and things around him. He uses language to greet people, to get their attention, to ask for a few services and things, and to protest. He uses language to note when things are present, when they're gone, and when they return or are brought back. He communicates a good deal more than he actually expresses explicitly. He does this by pointing, looking, and touching to identify what he is talking about. Moreover, he leaves it up to others to figure out what he leaves unsaid. P2

P2+

The child manages to communicate much more than she actually puts into words. She relies less on the immediate physical context than at P-2, since she uses phrases and short sentences. She knows more words than others can keep track of easily. She talks about what she does while doing it and can request many different things and services. She can identify a variety of actions and things in pictures, and can describe people and objects by their familiar features. She talks about where things are, where they are going, and who owns them. She can use short phrases and sentences. P3

P3+

The child talks about things in the immediate physical environment that he is about to do or intends to do. He talks about things other people are doing even if they don't have anything to do with him. He uses language to P4
create make-believe conditions. He can talk about several things at once and manages to say most of what he means, rarely leaving things unsaid that should be expressed. He understands friends and familiar adults easily, and they understand him easily too.

P4+

The child tells complicated stories about things that happened in the past or may happen in the future. Even strangers (at least strangers accustomed to deaf children) can understand her easily, and she understands them. They understand each other even when one party does not know anything about the place where the story occurs. The child can say a lot about how different things relate to each other; about how one thing makes something P5
else happen; how one thing contradicts another; how one thing changes as a result of another; and how some things have to wait on others. She can talk about what is happening, who is doing what, what state things are in, what people are doing, and why. She can carry on extensive conversations; she sticks to the point and has a lot to say from experience that relates to what the other person is saying.

P5+

The child communicates successfully with others about things he has done or experienced. He can carry on long and complicated conversations with strangers who don't know anything about him or what he wants to talk about. In groups, he is generally able to follow what people are saying, and can P6
keep up a steady flow of conversation that is clear to anyone. He uses language to influence the thinking, opinions, and attitudes of others. He uses it to talk about alternatives, and to speculate on what he and others might do under different circumstances.

P6+

The child can say what she intends to say without circling around it. She can provide a lot of background material so that people she is talking to won't be lost when she describes fairly abstract things like the rules of games, or how a ten-speed bicycle works. In a group discussion she can follow in detail what is being said by everybody. She refers to principles P7
to try to influence people. When she is talking to someone who misses the point, she can use other words to say the same thing so the person can understand. When she doesn't quite understand what someone else means, she can pinpoint the information she needs.

APPENDIX D

COMMUNICATION ASSESSMENT TOOLS, MATERIALS

Auditory Assessment Tools

1. TAC: Test of Auditory Comprehension (Office of Los Angeles County Public Schools, 1976). Available from Foreworks, P.O. Box 9747, North Hollywood, CA 91609.

2. PBK: Phonetically Balanced Word Lists—Kindergarten (Haskins, 1949).

3. WIPI: Word Intelligibility by Picture Identification (Ross & Lerman, 1971). Available from Stanwix House, Inc, 3020 Charters Ave., Pittsburgh, PA 15204.

4. NU-CHIPS: Northwestern University Children's Perception of Speech (Elliot and Katz, 1980). Available from Auditec of St. Louis, 402 Pasadena Ave., St. Louis, MO 63119.

5. SERT: Sound Effects Recognition Test (Finitzo-Hieber, Matkin, Cherow, & Gerling, 1977). Available from Auditec of St. Louis, 402 Pasadena Ave., St. Louis, MO 63119.

6. KAPS: Kendall Auditory Profile Screening (evaluation of speechreading and auditory skills, unpublished). Available from Kendall Demonstration Elementary School, Gallaudet University, Washington, DC 20002.

Speech Assessment Tools

1. Phonetic/Phonologic Level Speech Evaluation. In Speech for the Hearing Impaired Child: Theory and Practice, by Daniel Ling, pages 135-172 (evaluation forms also available). Washington, DC: A. G. Bell Association for the Deaf, 1976.

2. Goldman-Fristoe Articulation Test, American Guidance Service, 1968

Language Assessment

See the KDES Language Arts Curriculum Guide. The Language Proficiency Levels (P-Levels) provided in this guide are referenced in Appendix III. The bibliography also has information on the Language Arts Guide.

APPENDIX E

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Board of Education, City of Chicago. A Workbook in Speech Therapy, 1965. A workbook of activities to use with young stutterers. Part three suggests therapy techniques to use for students with tense or strained voices and phrasing problems.

Boone, D., The Voice and Voice Therapy. Englewood Cliffs, NJ: Prentice-Hall, 1977. Chapters 5-7 of this book include techniques for common voice problems associated with hearing impairment, and instructions for 24 in-depth "facilitating approaches" to voice therapy.

Calvert, D. and Silverman, S., Speech and Deafness. Washington, DC: Alexander Graham Bell Assn., 1975. Provides an instructional analysis of consonants and vowels; suggests techniques for the development and correction of sound production.

Castle, D., Telephone Training for the Deaf. Rochester, NY: National Technical Institute for the Deaf, 1980. Information on telephone components and their functions; activities and strategies for use of the telephone.

Clarke School for the Deaf. Speech Development Curriculum Series. Northampton, MA: 1971. Suggests remedial techniques for voice and articulation problems, practice exercises.

Deyo, D., Ring/Flash: Telephone Skills for Deaf and Hard-of-Hearing Students. Washington, DC: Outreach, Gallaudet Pre-College Programs, 1985. Designed to teach hearing impaired children proper use of the telephone and the TTY, this book includes finding information in phone directories, getting help from operators, using good telephone manners, handling emergencies, and other important skills. The student workbook is supplemented by transparency masters, and the teacher guide has suggestions for lesson planning, practice and evaluation.

Deyo, D., Hallau, M., Communicate With Me: Conversation Strategies for Deaf Students. Washington, DC: Outreach, Gallaudet Pre-College Programs, 1988. This instructional program discusses and provides activities for mastering such basic communication skills as selecting appropriate communication methods, gaining attention, turn-taking, maintaining and ending a conversations, and repairing conversational breakdowns.

Flowers, A., The Big Book of Sounds, Second Edition. Danville, IL: Interstate Printers and Publishers, 1974. Suggestions for teaching the production of major consonant sounds: syllable drills, word lists, verses, and sentences containing the sounds.

Griffith, J. and Miller, L., Phonetic Context Drillbook. Englewood Cliffs, NJ: Prentice-Hall, 1979. This comprehensive drillbook contains word lists organized by phonemes, consonant/vowel combinations, and syllable position. Also contains more than 6000 common phrases and sentences providing phonetic contexts for all phonemes.

Haycock, S.G., The Teaching of Speech. Washington, DC, The Volta Bureau, 1972. Addresses problems in the areas of voice, speech production, and rhythm. Suggests specific development and remediation techniques and activities for use with young deaf speakers, with practical suggestions for promoting intelligible speech. Appendices include exercises in breathing, accent, emphasis, and phrasing.

Heilman, A., The New Phonics We Use: Books C, D, and E. Chicago, IL: Lyons and Carnahan, 1972. This series of phonics books provides activities, rules, and generalizations for identifying consonants and vowels in words, syllables in words, and stresses or accents in words.

Jeffers, J., Barley, M., Speechreading. Springfield, IL: Charles C. Thomas, 1979. A good resource for special instruction in lipreading: familiar speech phrases, minimally paired words, sentences and stories.

Jeffers, J., Barley, M., Look, Now Hear This. Springfield, IL: Charles C. Thomas, 1977. This book can also be used as a resource for instructional materials such as minimally paired words, overlearned speech phrases (arranged according to topics), idiomatic expressions, simple stories, games, and skits.

Kendall Demonstration Elementary School, KDES Language Arts Curriculum Guide. Washington, DC: Outreach, Gallaudet Pre-College Programs, 1985. This guide targets student competence in reading, writing, and through-the-air language. A pragmatic approach is used to set up teacher and student strategies, goals, resources, and evaluation criteria.

Ling, D., Speech and the Hearing Impaired Child: Theory and Practice. Washington, DC: Alexander Graham Bell Assn. for the Deaf, 1979. Chapters 11 through 18 define target behaviors, sub-skills, and teaching strategies at the phonetic and phonological levels for voice control or quality, voice patterns (duration, intensity, and pitch), vowels, and consonants.

Los Angeles County Board of Education, Auditory Skills Curriculum: Auditory Skills Instructional Planning System, Volume 1. North Hollywood, CA, 1976. Worksheet activities for word stress in sentences.

Schoenfeld, Diane, Games Kids Like and More Games Kids Like. Tuscon, AZ: Communication Skill Builders, Inc., 1975. Games and game sheets for language and articulation drills, organized by suggested grade levels.

Sonderman, J., Zwitman, D., Programmed Articulation Carryover Stories. Tuscon, AZ: Communication Skill Builders, Inc., 1976. Two stories for each target phoneme, with pictures and sentences that can be used to facilitate carryover of sounds into spontaneous speech.

Waddy-Smith, Bettie, Let's Hear a Story. Washington, DC: Outreach, Pre-College Programs, Gallaudet University, 1984. Tape/book library presents favorite children's stories in picture books and audiotaped readings. A teacher guide suggests ways to use the materials in building auditory skills.

Waling, Sandra, & Harrison, Wayne, A Speech Guide for Teachers and Clinicians of Hearing Impaired Children. Tucson, AZ: Communication Skill Builders, 1987. Strategies for teaching the correct production of each speech sound. Possible causes of incorrect production, with suggested remedies. Illustrations indicate the articulator positions for production of each phoneme.

Worthy, W., Sourcebook of Articulation Learning. Boston, MA: Little, Brown and Co., 1981. Teaching strategies and activities for production of all major phonemes and blends in various contexts.

APPENDIX F.

COPIES OF RECORD-KEEPING FORMS

The forms on the following pages may be copied for school use. They are used to prepare IEPs and to track student progress through the communication curriculum.

Forms A and B are useful for recording functioning levels and goals for a class or group of students. The Individual IEP form provides space for more detailed information about the progress of specific students. Unit IV of this guide has samples of these forms with student information added.

The various Progress Charts cover in detail the areas of Hearing Aid Use, Speechreading, Speech, and Functional Communication Skills. These charts may be filled out by a succession of teachers and kept in the student's permanent file.

Form A

IEP INFORMATION SHEET
CLASS AURAL FUNCTIONING LEVELS AND GOALS

Teacher's Name _____ Year: _____

Students' Names	Date of Audiogram	Degree of Loss	Hearing Aid Use		Audition		Speechreading	
			Level	Goals	Level	Goals	Level	Goals

Form B

IEP INFORMATION SHEET
CLASS ORAL FUNCTIONING LEVELS AND GOALS

Teacher's Name _____ Year: _____

Student's Name	Intelligibility Rating	Phonetic Level	Phonetic Goals	Phonetic Targets	Phonologic Level	Phonologic Goals	Phonologic Targets

Functional Comm. Level	Functional Comm. Goals	Language Level	Language Goals	Comments

Student's Name	Intelligibility Rating	Phonetic Level	Phonetic Goals	Phonetic Targets	Phonologic Level	Phonologic Goals	Phonologic Targets

Functional Comm. Level	Functional Comm. Goals	Language Level	Language Goals	Comments

Student's Name	Intelligibility Rating	Phonetic Level	Phonetic Goals	Phonetic Targets	Phonologic Level	Phonologic Goals	Phonologic Targets

Functional Comm. Level	Functional Comm. Goals	Language Level	Language Goals	Comments

Form C

INDIVIDUAL IEP FORM

Child's Name _____

Today's Date _____ Date of Last Audiogram _____

AURAL FUNCTIONING

1. Hearing Levels: Right Ear _____

   Left Ear _____

2. Hearing Aid Use

   Current Functioning _____

   _____

   Goal(s) _____

   _____

   _____

3. Audition

   Current Functioning _____

   _____

   Goal(s) _____

   _____

   _____

4. Speechreading

   Current Functioning _____

   _____

   Goal(s) _____

   _____

   _____

Child's Name _____ Date _____

ORAL FUNCTIONING

5. Intelligibility Rating _____

   Level _____

6. Phonetic Development

   Current Functioning _____

   _____

   Goal(s) _____

   _____

   _____

7. Phonologic Development

   Current Functioning _____

   _____

   Goal(s) _____

   _____

   _____

8. General Communication

   Current Functioning _____

   _____

   Goal(s) _____

   _____

   _____

9. Language Level

   _____

   _____

KDES YEARLY PROGRESS CHART
AUDITORY/SPEECH SKILLS

Student_____ Current Level of Functioning_____

Goals for 19___ - 19___ Level/Grade_____ Department: P I MS

___ Complete objectives indicated.

___ Complete all objectives.

KEY: |_| not taught
|/| partially learned
|■| learned

HEARING AIDS (HA)

|_| HA1 Uses Amplification:

- |_| HA1.1 Allows aid to be put on.
- |_| HA1.2 Keeps aid on for short time (10 minutes).
- |_| HA1.3 Wears aid for a few hours.
- |_| HA1.4 Wears aid most of the day.

|_| HA2 Takes off Hearing Aid:

- |_| HA2.1 Removes earmold from ear.
- |_| HA2.2 Removes aid from harness (body aid users only).
- |_| HA2.3 Places aid in designated place

|_| HA3 Puts on Hearing Aid:

- |_| HA3.1 Puts on body aid:
  a. Places harness on body.
  b. Places aid in harness.
  c. Places earmold in ear.
- |_| HA3.2 Puts on ear-level aid.
  a. Places aid behind ear (no earmold).
  b. Assists with placing earmold in ear.
  c. Places earmold/aid on with no assistance.

|_| HA4 Manages Hearing Aid Controls:

- |_| HA4.1 Indicates position of control on hearing aid.
  a. On/Off
  b. Volume
- |_| HA4.2 Manipulates on/off and volume controls:
  a. While holding aid.
  b. With aid on ear.
- |_| HA4.3 Turns hearing aid on and sets volume independently.

|_| HA5 Tests Hearing Aid Battery:

- |_| HA5.1 Places battery on tester in appropriate space.
- |_| HA5.2 Turns voltmeter to appropriate place.
- |_| HA5.3 Places testing stem on battery.
- |_| HA5.4 Indicates understanding of meter reading.

|_| HA6 Changes Hearing Aid Battery:

- |_| HA6.1 Locates battery compartment.
- |_| HA6.2 Opens battery compartment.
- |_| HA6.3 Takes out old battery.
- |_| HA6.4 Puts in new battery.

|_| HA7 Cleans Earmold:

- |_| HA7.1 Indicates when mold is dirty.
- |_| HA7.2 Detaches mold from aid.
- |_| HA7.3 Loosens canal debris with pipe cleaners.
- |_| HA7.4 Washes mold in warm soapy water.
- |_| HA7.5 Dries mold completely.

|_| HA8 Knows Consumer Information:

- |_| HA8.1 Indicates hearing aid brand name and model number.
- |_| HA8.2 Indicates battery size specific to aid.
- |_| HA8.3 Indicates ability to locate serial number on hearing aid.

SPEECHREADING (SR) Student_____

|_| SR1 Awareness of Speechreading

- |_| SR1.1 No awareness that speechreading provides information.
- |_| SR1.2 Aware that speechreading provides information:
  a. inconsistently. b. consistently.

|_| SR2 Single Words:

- |_| SR2.1 Discriminates between single words.
- |_| SR2.2 Identifies single words in a structured situation.
  a. few (< 10) b. many (> 10)
- |_| SR2.3 Comprehends many words in the natural environment.

|_| SR3 Familiar Phrases:

- |_| SR3.1 Discriminates between familiar phrases.
- |_| SR3.2 Identifies familiar phrases in a structured situation.
  a. few (< 10) b. many (> 10)
- |_| SR3.3 Comprehends many familiar phrases in the natural environment.

|_| SR4 Details in Sentences:

- |_| SR4.1 Identifies details in sentences in a structured situation.
  a. two details b. three details c. four details
- |_| SR4.2 Comprehends details in the natural environment.

|_| SR5 Connected Sentences

- |_| SR5.1 Comprehends specific information about a connected passage:
  a. Given topic and questions before hearing the passage.
  b. Given no prior cues about the passage.

PHONETIC (PT) Student_____

|_| PT1. Spontaneous Vocalizations

- |_| PT1.1 No spontaneous vocalization during stimulated activities.
- |_| PT1.2 Vocalizes spontaneously during stimulated activities. No indication of vocalizing for communication purposes.
- |_| PT1.3 Produces voice on demand:
  a. inconsistently. b. consistently.

|_| PT2. Suprasegmental Features:

- |_| PT2.1 Produces desired duration patterns (sustained, repeated, varied): a. inconsistently. b. consistently.
- |_| PT2.2 Produces desired intensity patterns (loud, quiet, whispered):
  a. inconsistently. b. consistently.
- |_| PT2.3 Produces desired pitch patterns (high, mid, low):
  a. inconsistently. b. consistently.
- |_| PT2.4 Produces appropriate stress patterns in nonsense syllables:
  a. inconsistently. b. consistently.
- |_| PT2.5 Produces suprasegmental features using appropriate voice quality: a. inconsistently. b. consistently.

|_| PT3. Specific Target Sounds (See student's IEP).

PHONOLOGIC (PL) Student_____

|_| Pl1 Spontaneous Vocalizations

- |_| PL1.1 No spontaneous vocalization for communication purposes.
- |_| PL1.2 Vocalizes for communication purposes spontaneously.
  a. inconsistently. b. consistently.
- |_| PL1.3 Responds to directed vocalization with a vocalization:
  a. inconsistently. b. consistently.

|_| PL2 Suprasegmental Features

- |_| PL2.1 Produces appropriate intensity in various situations:
  a. inconsistently. b. consistently.
- |_| PL2.2 Produces pitch that sounds natural and appropriate:
  a. inconsistently. b. consistently.
- |_| PL2.3 Produces appropriate durational patterns in words:
  a. inconsistently. b. consistently.
- |_| PL2.4 Produces appropriate patterns of duration, intensity and intonation during meaningful communication, but "words" may not be understood:
  a. inconsistently. b. consistently.
- |_| PL2.5 Produces overall voice quality that is considered acceptable:
  a. inconsistently b. consistently

|_| PL3 Syllabification

- |_| PL3.1 Discriminates the correct number of syllables:
  a. in words. b. in short phrases. c. in short sentences.
- |_| PL3.2 Produces the correct number of syllables using appropriate duration and rate in:
  a. words inconsistently. b. words consistently.
  c. phrases inconsistently. d. phrases consistently.
  e. sentences inconsistently. f. sentences consistently.
- |_| PL3.3 Produces appropriate syllable stress.
- |_| PL3.4 Produces appropriate rate and phrasing of words in:
  a. phrases inconsistently. b. phrases consistently.
  c. sentences inconsistently. d. sentences consistently.

|_| PL4 Target Sounds

|_| PL4.1 Discriminates target sounds in:
a. words inconsistently. b. words consistently.
c. phrases inconsistently. d. phrases consistently.
e. sentences inconsistently. f. sentences consistently.

|_| PL4.2 Produces target sounds in a structured situation in:
a. words inconsistently. b. words consistently.
c. phrases inconsistently. d. phrases consistently.
e. sentences inconsistently. f. sentences consistently.

|_| PL4.3 Incorporates targets into spontaneous communication:
a. inconsistently. b. consistently.

FUNCTIONAL COMMUNICATION SKILLS (FC) Student_____

|_| FC1 Mouth Movements

- |_| FC1.1 Does not match mouth movements.
- |_| FC1.2 Matches mouth movements.
- |_| FC1.3 Approximates mouth movements with consonant/vowel combinations: a. in syllables. b. in words.
- |_| FC1.4 Approximates mouth movements for words:
  a. in familiar phrases. b. in new phrases and sentences.
  c. during conversation.

|_| FC2 Facial Expressions

- |_| FC2.1 Does not attend to facial expression of speaker.
- |_| FC2.2 Attends to facial expression of speaker, is aware that communication occurs through facial expression (smiling, frowning, etc.)
- |_| FC2.3 Exhibits appropriate facial expression:
  a. when expressing different emotions.
  b. when interpreting poetry/songs/stories.
  c. during conversational speech.

|_| FC3 Conversational Strategies

- |_| FC3.1 Does not apply rules of turn-taking, good attending skills.
- |_| FC3.2 Applies rules of turn-taking, good attending skills.
- |_| FC3.3 Uses appropriate strategies to attract the attention of deaf individuals.
- |_| FC3.4 Uses appropriate strategies to attract the attention of hearing individuals.
- |_| FC3.5 Selects appropriate conversational strategies depending on hearing status of participants and context of conversation.
- |_| FC3.6 Uses appropriate repair strategies.
- |_| FC3.7 Initiates, maintains, and ends conversations appropriately.
- |_| FC3.8 Uses appropriate conversational strategies for giving and receiving information via TDD or telephone.
  a. Demonstrates understanding of basic components and operation of TDD/telephone.
  b. Demonstrates understanding of abbreviations and telephone signals when conversing on the TDD or telephone. Applies them appropriately (e.g. GA, SK, busy signal, ringing).
  c. Uses proper etiquette for the TDD or telephone.

KDES SPEECH PROGRESS CHART
AUDITORY/SPEECH SKILLS

Student_____ Date_____

Dept/Teacher_____ Speech Specialist_____

Present Level of Performance: ✓ = attained + = inconsistent
- = exposed * = current goal

I. VOCALIZATION:

A. On demand _____
B. Spontaneous _____
C. Intensity 1. Loud_____ 2. Quiet_____ 3. Whisper_____ 4. Varied_____
D. Duration 1. Brief_____ 2. Sustained_____ 3. Varied_____
E. Pitch 1. High_____ 2. Mid_____ 3. Low_____ 4. Varied_____

VOWELS:	1 Single Syl.	2 Sustain 3-15 sec	3 Vary Duration	4 Repeat Syl.	5 Altnt Syl.	6 Vary Intens	7 Vary Pitch	8 Phonol Level
II. Step 1								
A. oo (blue)								
B. a(r) (arm)								
C. ee (bee)								
D. i-e (my)								
E. o-u (cow)								
III. Step 2								
A. aw (awful)								
B. oy (boy)								
C. -e- (bed)								
D. oo (book)								
E. -i- (big)								
IV. Step 3								
A. -a- (apple)								
B. -u- (bus)								
C. o-e (no)								
D. a-e (day)								
V. Step 4								
A. er (bird)								

Student_____ Date_____

CONSONANTS:	1 Single Syl.	2 Sustain 3-15 sec	3 Vary Duration	4 Repeat Syl.	5 Altnt Syl.	6 Vary Intens	7 Vary Pitch	8 Phonol Level
VI. Step 1								
A. p or b								
B. w or wh								
C. f or v								
D. th^1, th^2								
E. h								
F. m								
G. $\overline{p}$ or $\overline{b}$								
VII. Step 2								
A. t or d								
B. sh or sh								
C. s or z								
D. n								
E. y-								
F. $\overline{l}$								
G. $\overline{t}$ or $\overline{d}$								
VIII. Step 3								
A. g or k								
B. ch or j								
C. ng								
D. r								
E. $\overline{g}$ or $\overline{k}$-e								
BLENDS:								
IX. Word Initial								
A. sm, sp, sw								
B. sk, sl, sn, st, thr								
C. bl, br, fl, fr, kw, pl, pr, tw								
D. dr, gl, gr, kr, shr, tr								
E. skr, skw, spr, str								

Student_____ Date_____

CONSONANTS: (continued)	1 Single Syl.	2 Sustain 3-15 sec	3 Vary Duration	4 Repeat Syl.	5 Altnt Syl.	6 Vary Intens	7 Vary Pitch	8 Phonol Level
X. Word Final								
A. fs, lm, ln, lz, mz, ns, nz, ng, sl, ths, sn, vz								
B. ft, ld, lp, lt, mp, nd, nt, ngks, sp, vd, zd								
C. bl, bz, dl, dz, gl, kl, ks, pl, ps, tl, tm, tn, ts								
D. kt, pt, gd, bd								
E. fts, kts, mblz, nds, skt								

	1 Syllables Alternated with Voice; Voiceless Distinction	2 Phonological Levels
XI. Step 4		
A. p, t, k, vs, b, d, g		
B. p, t, k, vs, b, d, g		
C. w, vs, wh		
D. f, th[4], sh, s, vs, v, th[4], zh, z		
E. ch, vs, j		

Gallaudet University
Pre-College Programs